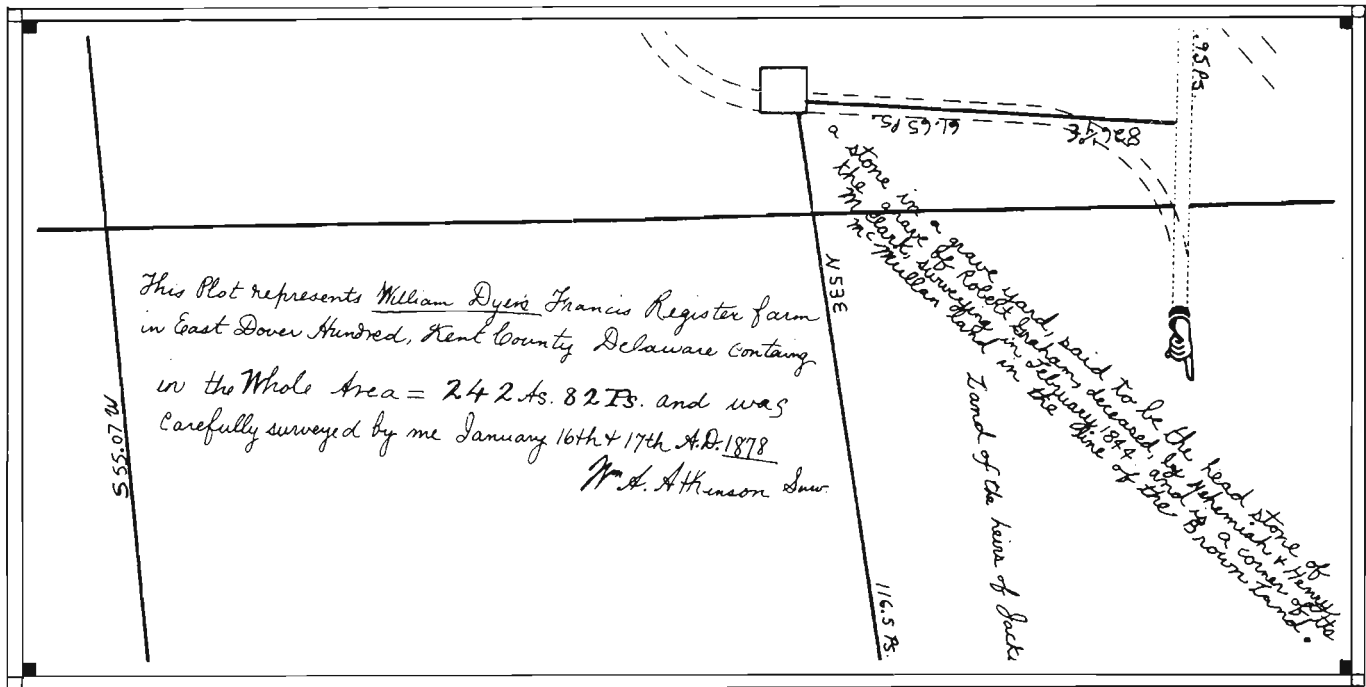


Final Archaeological Investigations of the Lafferty Lane Cemetery 7K-D-11, State Route 1 Relief Corridor, Dover, Kent County, Delaware



by

David C. Bachman and Wade P. Catts

UNIVERSITY OF DELAWARE
Department of Anthropology
Center for Archaeological Research

Delaware Department of Transportation Archaeological Series No. 80



Delaware Department
of Transportation

John T. Davis
DIRECTOR
Division of Highways

US Department
of Transportation
Federal Highway
Administration



FINAL ARCHAEOLOGICAL INVESTIGATIONS
OF THE LAFFERTY LANE CEMETERY 7K-D-111,
STATE ROUTE 1 RELIEF CORRIDOR,
DOVER, KENT COUNTY, DELAWARE

DELDOT PROJECT 89-110-01 DELDOT ARCHAEOLOGY SERIES NO. 80

FHWA FEDERAL AID PROJECT F-1005(15)

By

David C. Bachman and Wade P. Catts

UNIVERSITY OF DELAWARE
Department of Anthropology
Center for Archaeological Research

Submitted To

U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration

and

DELAWARE DEPARTMENT OF STATE
Division of Historical and Cultural Affairs
Bureau of Archaeology and Historic Preservation

Prepared For

DELAWARE DEPARTMENT OF TRANSPORTATION
Division of Highways
Location and Environmental Studies Office

John T. Davis
Director
Division of Highways

Doc. Con. No.
55-04/90/05/01

1990

ABSTRACT

Recent excavations along the Delaware Route 1 Relief Corridor near Dover, Delaware have revealed an unmarked private cemetery containing the remains of approximately 120 individuals. The one-quarter acre burying ground was apparently in use between 1760 and 1840 and includes individuals from several related families. Previous analyses of cemeteries of this period have concentrated on osteological considerations and on headstone art as an expression of society's attitudes towards death. At the Lafferty Lane cemetery, no headstones of any type were found and none of the graves were excavated due to resource management considerations. Therefore, the analyses of the site have shifted to other directions. These include the cemetery as an expression of an extended family community in a rural setting, the layout of the cemetery as an architectural plan, the internal grave organization of this and other nearby rural family cemeteries, topographic considerations for cemetery placement on the individual farm, and a comparison of this cemetery with public and private records regarding death and dying during this period. Although no graves were excavated, the analysis of the Lafferty Lane cemetery is useful as a tool for the inclusion of rural family cemeteries in future resource management plans.

ACKNOWLEDGEMENTS

Appreciation for their support, administration, research, and services is extended to all of the following individuals:

From Diversified Business Enterprises, Inc., Lafferty Lane, Dover: Mr. Roy Johns, Vice-President.

Mr. S. G. Williams of Dover, Inc., Lafferty Lane, Dover.

From the Division of Highways: Raymond D. Richter, Assistant Director, Preconstruction; Joseph T. Wutka, Jr., Location Studies and Environmental Engineer; Kevin W. Cunningham, DelDOT Archaeologist; Tim O'Brian, Photographer; Carol L. Kates, Secretary; Joanna Likens, Project Scheduling and Support. From Central District Engineering Office: Jack Schuh, Central District Chief Engineer; Dennis Ho, Engineer; Allen Cook, Maintenance Superintendent; Sam Powell, Supervisor; Richard Meisinger, Gary Bodine, Julian Rexrode, Bill Carter, and Al Ward, Equipment Operators.

From Century Engineering: Foster Hoffman, Engineer.

From the Federal Highway Administration: John J. Gilbert, Division Administrator; Robert Wheeler, Realty/Environmental Specialist.

From the Division of Historic and Cultural Affairs: Daniel R. Griffith, Director and State Historic Preservation Officer.

From the Bureau of Archaeology and Historic Preservation: Joan N. Larrivee, Bureau Chief; Alice H. Guerrant, Archaeologist; Faye L. Stocum, Archaeologist.

From the University of Delaware: Juan Villamarin, Chairman, Department of Anthropology; Carolyn Fierro, Administrative Assistant; Joanne Faulls, Secretary, Department of Anthropology.

From the Division of Graphics and Printing: Ray Moore, Shop Supervisor; John Bordley, Pressman; Bob Farley, Pressman; Dorothy Hutchins, Machine Person; Joan Pillsbury, Bindary Clerk; Grace Steele, Graphics Specialist; William Yerkes, Cameraman and Pressman; and James Sylvester, Pressman.

The Delaware State Archives, Hall of Records, Dover.

From Private Sources: Alice McFarland, Historian.

Living descendants of Robert Graham: Edward F. Heite, Local Historian and Archaeologist who brought the family connection to us; David C. Graham, Raymond D. Lafferty, Walter Graham, Harry K. Heite, Jr., Pamela Berry, John L. Graham, Robert Reynolds van Gulick, Richard Wallace Gulick, Jane Lee Rusch, Mary Lou Laughlin, Mrs. Emily Hering Graham Stuart, John L. Graham, Margaret G. Hinson, Jackson Lafferty.

TABLE OF CONTENTS

	Page
Abstract	i
Acknowledgements	ii
Table of Contents	iii
List of Figures, Tables, and Plates	iv
Introduction	1
Environmental Setting	4
Regional History	6
Background Research	17
Land Records	19
Genealogical Reconstruction	31
Excavation Methods	33
Results of Fieldwork	36
Analyses and Interpretations	55
Intrasite Analyses	57
Internal Structure	57
Orientation	59
Grave Clusters	59
Graveshaft Outline	72
Postholes and Postmolds	75
Boundary Ditches	78
Intersite Analyses	81
Comparisons with other Local Family Cemeteries	81
Geographical Considerations of Family Cemetery Placement	84
Conclusions	92
References Cited	101
Personnel	107
Appendices	109
Appendix I: Delaware Unmarked Burial Law	109
Appendix II: Discovery of Human Remains Form	116
Appendix III: Lafferty Lane Site Artifact Inventory	119
Appendix IV: Glossary	121

LIST OF FIGURES

	Page
Figure 1: Project Area Location	2
Figure 2: Original Re-alignment of Lafferty Lane and Later Alignment Shift due to Discovery of Cemetery	3
Figure 3: Physiographic Zones	5
Figure 4: Lafferty Lane Cemetery Location on 1878 Atkinson Survey	18
Figure 5: Summary of Deed Transactions	20
Figure 6: Composite Drawing, Benjamin Brown Landholdings, circa 1764	26
Figure 7: Composite Drawing, Landholdings in Graveyard Vicinity, circa 1814	27
Figure 8: Partial Brown Family Genealogy	32
Figure 9: 7K-D-111 Lafferty Lane Cemetery Site Map (see rear cover pocket)	
Figure 10: Profile of Feature 79, North Boundary Ditch ...	49
Figure 11: Plan View of Feature 2	54
Figure 12: Graveshaft Lengths in 1.0' Increments at 7K-D-111	58
Figure 13: Composite of Dwelling-to-Family Graveyard Distance, Kent County Sample	86
Figure 14: Composite of Dwelling-to-Family Graveyard Distance, Proposed Sussex East-West Corridor Study Sample	88
Figure 15: Number of Cemeteries per Distance Increment ...	90
Figure 16: Composite of Dwelling-to-Family Graveyard Distance, Combined Kent County and Sussex County Sample	91

LIST OF TABLES

	Page
Table 1: Feature Types at Lafferty Lane Cemetery	36
Table 2: Feature List at Lafferty Lane Cemetery	40
Table 3: Burial Feature Clusters	60
Table 4: Percentages of Hexagonal and Rectangular Graveshafts in Each Burial Cluster at Lafferty Lane Cemetery	73
Table 5: Posthole/Postmold Classification at Lafferty Lane Cemetery	74
Table 6: Comparison with Other Kent County Family Cemeteries Which are Roughly Contemporary with Lafferty Lane (from Dill 1989)	85
Table 7: Sussex County East-West Corridor Study Sample Cemeteries	89

LIST OF PLATES

		Page
Plate 1:	1948 Aerial Photograph of Lafferty Lane Cemetery Site	29
Plate 2:	Features 1,2,4,6,8, and 9 After Topsoil Stripping	35
Plate 3:	Panorama View of Cemetery After Topsoil Stripping	37
Plate 4:	Feature 125	38
Plate 5:	Feature 117, Hexagonal Graveshaft Outline	44
Plate 6:	Feature 142, Hexagonal Graveshaft Outline	45
Plate 7:	Feature 44, Oval Graveshaft Outline	46
Plate 8:	Feature 22, Rectangular Graveshaft Outline	47
Plate 9:	Feature 79, North Boundary Ditch	48
Plate 10:	Feature 25, Brick Burial Vault	50
Plate 11:	Feature 2, Coffin Lid Nails Exposed	52
Plate 12:	Feature 2, Skeletal Remains Exposed	53
Plate 13:	Features 47 and 93	64
Plate 14:	Feature 115 of Cluster 5 Intruding into Feature 114 of Cluster 6	66
Plate 15:	Feature 35, Rectangular Posthole	76
Plate 16:	Feature 91, Circular Posthole	77
Plate 17:	Feature 79, North Boundary Ditch Section Excavated	80

INTRODUCTION

[Aug] 8th being First day of Week 'rose Early & took a Walk to the Antient Seat of my Grandfather B. Shurmer before mentioned to View the Burial place of my prediccursors seated on a Hill E.S.E. of the Mansion House distance there from about 500 paces reserved in the sale of the place by the Heirs of said Shurmer for a Burial Ground to them & their Heirs forever, here Lyes the ashes of my Grandmother Sarah Shurmer my father & mother John & Sarah Mifflin, but no Traces left of their Graves. And altho I look upon the pomp of Tomb & head stones to be a relict of Paganism yet I allow that for Decency's Sake a mark Should be set on their Graves that when Others come to be Buried we may not Disturb their Bones ---

Benjamin Mifflin, 1762, discussing family farm in Kent County (Paltsits 1935)

The purpose of this report is to describe final archaeological investigations at the Lafferty Lane Cemetery, 7K-D-111, southwest of the intersection of U.S. 113 (Bay Road) and Lafferty Lane, Dover, Delaware (Figure 1). The investigations were conducted in September, October, and November, 1988 by the University of Delaware Center for Archaeological Research (UDCAR) for the Delaware Department of Transportation (DelDOT) and the Federal Highway Administration under Section 106 of the National Historic Preservation Act of 1966 to evaluate the effects of a proposed highway relocation and reconstruction on significant or potentially significant cultural resources as defined by the National Register of Historic Places (36CFR60). The archaeological investigations were conducted because the realignment of Lafferty Lane (Figure 2), necessitated by the location of the Delaware Route 1 Relief Corridor, would potentially affect the cemetery. There were no surface indications of the existence of this cemetery present within the

FIGURE 1
Project Area Location

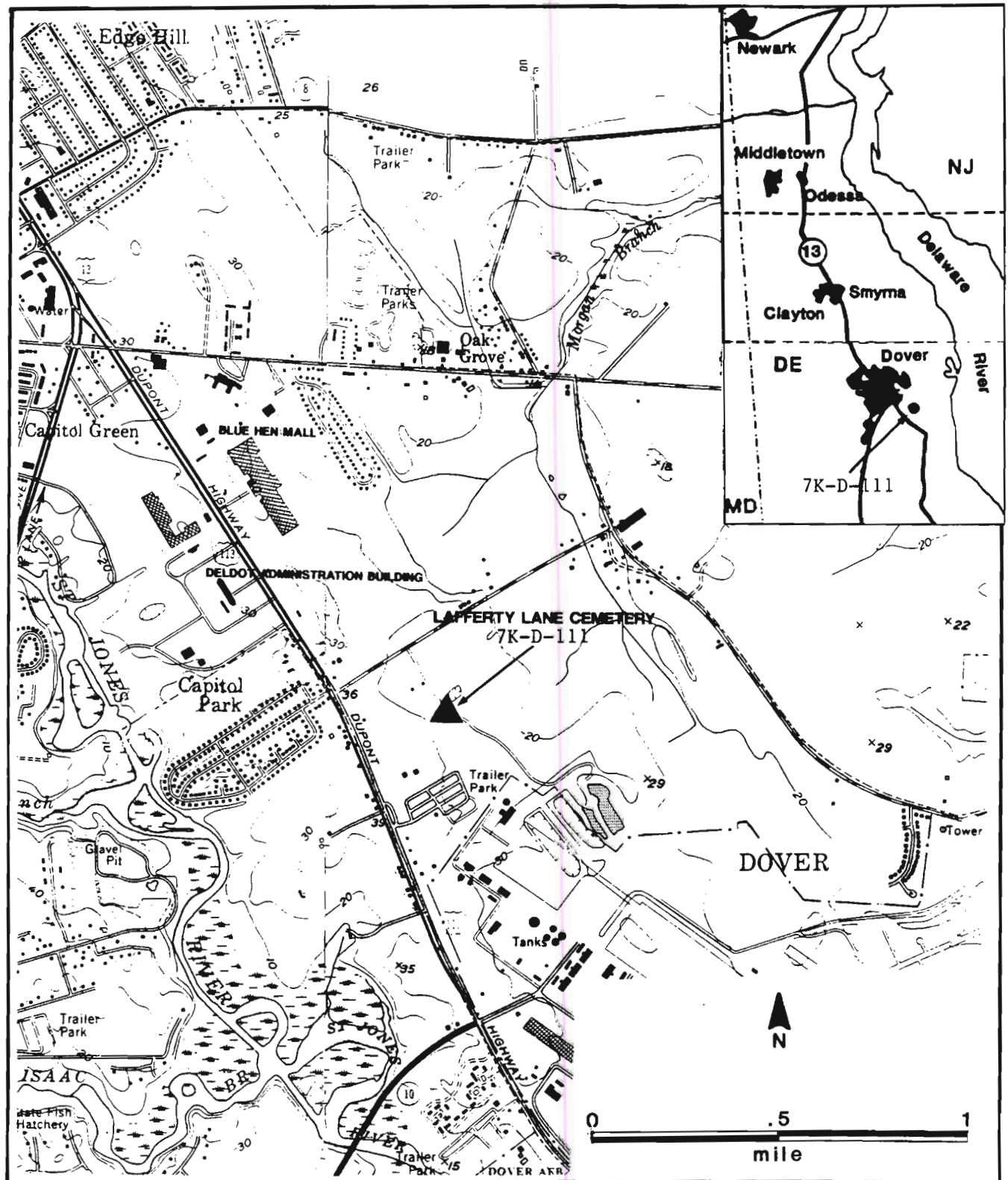
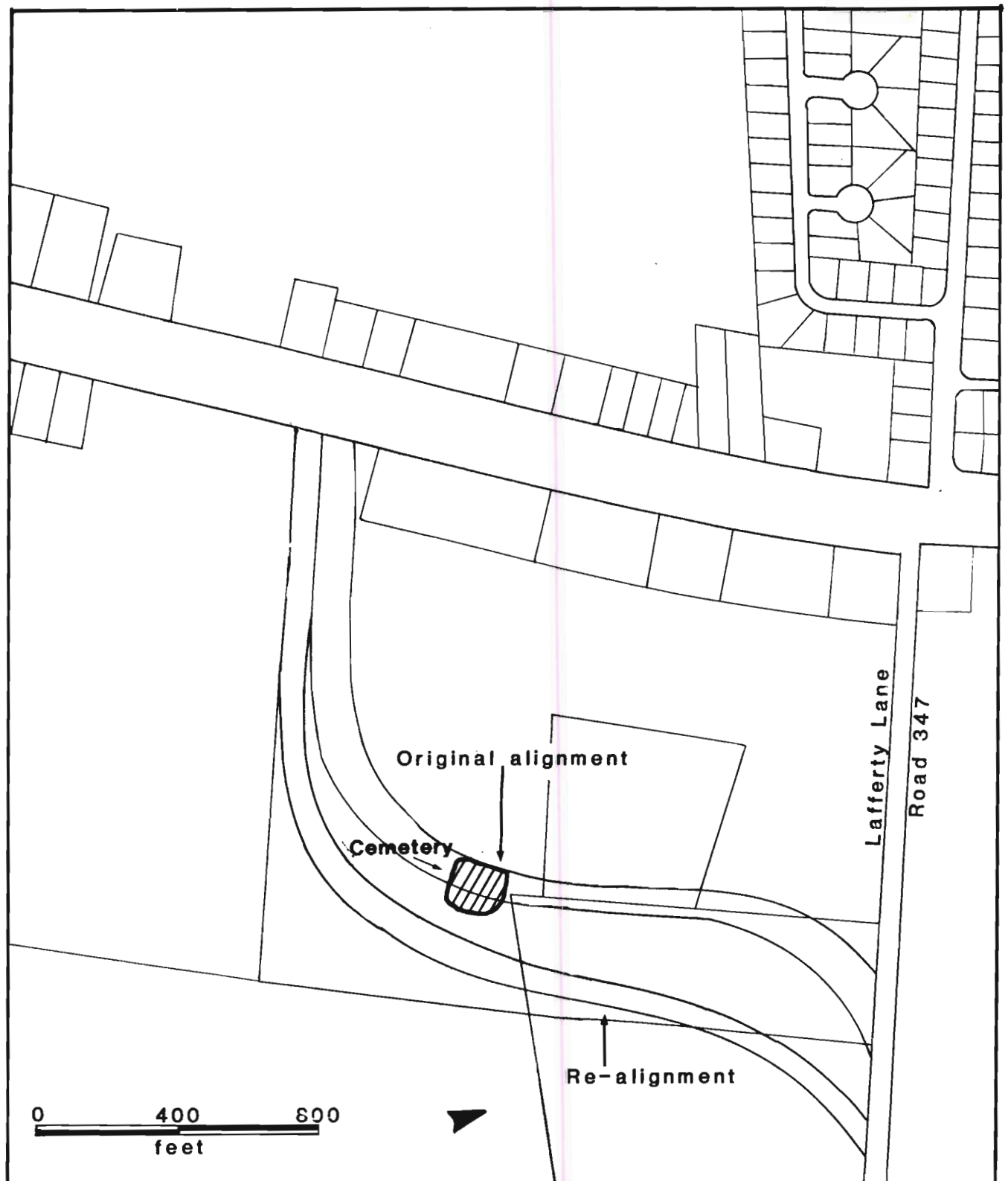


FIGURE 2

Original Alignment of Lafferty Lane and Later
Re-alignment Shift due to Discovery of Cemetery



proposed right-of-way prior to the start of the investigation. Archival research alerted the investigators to the potential existence of a nineteenth century cemetery within the project corridor and this research will be discussed more fully below.

The goals of this investigation included the definition of the limits of the site, verification of the presence of skeletal remains within the graveshafts, and an attempt to determine the identities of those buried within. Subsequent DelDOT planning decisions, in particular the shifting of the proposed right-of-way to avoid the cemetery, obviated the need for the removal, study, and reinterment of the skeletal remains as required by the recently enacted Delaware State Burial Law: Senate Bill 12, Subchapter 11 (Appendix I).

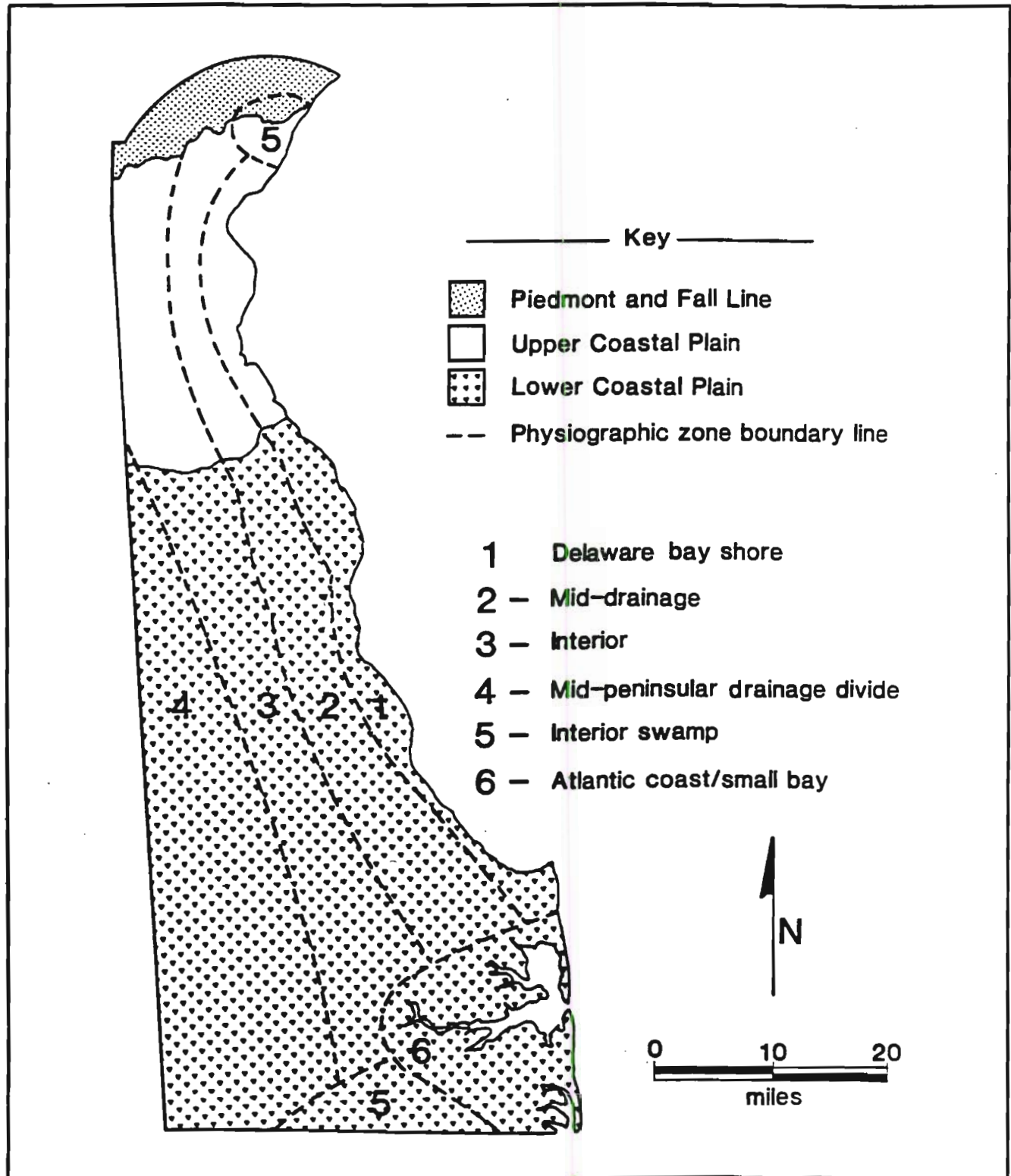
The research presented below will be organized into a discussion of the environmental setting, background research, excavation methods, results of fieldwork, intra- and inter-site analysis and interpretation, and concluding statements.

ENVIRONMENTAL SETTING

The project area is located in Kent County within the Low Coastal Plain physiographic province (Figure 3). The Low coastal Plain is underlain by the sand deposits of the Columbia Formation (Jordan 1964:40), and reworking of these sediments has produced a relatively flat and featureless landscape. Elevation differences range up to 30 feet (10 meters), and these small differences are moderated by long gradual slopes. These differences are, nonetheless, sufficient to cause differential distributions of plant and animal species. Water courses are tidal and brackish

FIGURE 3

Physiographic Zones



along their middle and lower reaches with extensive fringing marshes increasingly prevalent moving downstream along their lower reaches.

Site 7K-D-111 lies on an abandoned farm bounded on the west by U.S. 113 (Bay Road), on the north by Lafferty Lane, on the south by Dover Air Force Base, and on the east by a mixture of woodlots and agricultural fields (Figure 1). A large open field is situated across Lafferty Lane to the north, and some distance to the northeast and east of the site lie several swamps which form the headwaters for numerous streams draining into the Little River. Commercial structures line both sides of U.S. 113, but Lafferty Lane has seen little development and retains much of its rural character.

REGIONAL HISTORY

This short historical overview is abstracted from Munroe (1978, 1984), Hoffecker (1973, 1977), Weslager (1961, 1967), Lemon (1972), Hancock (1932, 1947, 1976), Hudson (1969), Scharf (1888), Hayes (1860), and Bausman (1940, 1941). A more detailed historical overview of the general Route 13 Corridor is provided in the Phase I/II research plan (Custer, Bachman, and Grettler 1987).

The earliest colonial settlement in Delaware known as Swanendael ("valley of swans") was made at present Lewes in 1631 under the sponsorship of patroons of the Dutch West India Company for the purpose of whaling and raising grain and tobacco. This venture was privately financed, but it ended in tragedy as the all-male population was massacred by the local Indians in 1632.

Farther north, a group of Swedes in the employ of the New Sweden Company built Fort Christina in 1638 in what is now part of the present city of Wilmington establishing the first permanent European settlement in Delaware. The Swedish government supported the venture, and Fort Christina became the nucleus of a scattered settlement of Swedish and Finnish farmers known as New Sweden. Within a few years, this Swedish settlement included a fort, church, and small farming community.

The Dutch claimed the identical land -- from the Schuylkill River south -- by right of prior discovery, and in 1651 the West India Company retaliated by building Fort Casimir at New Castle in an attempt to block Swedish efforts to control commerce in the Delaware River. The Swedes captured this fort in 1654 and renamed it Fort Trinity. Rivalry between Swedes and Dutch continued, and the Dutch recaptured Fort Trinity in 1655, and also seized Fort Christina. As a result, New Sweden went out of existence as a political entity due to lack of support from the homeland although the Swedish families continued to observe their own customs and religion.

In 1657, as a result of peaceful negotiations, the city of Amsterdam acquired Fort Casimir from the West India Company and founded a town in the environs of the fort called New Amstel. This was a unique situation in American colonial history -- a European city became responsible for the governance of an American colony. A small fort was also erected at Lewes in 1659 for the purpose of blocking English intrusion, and a few settlers built homes there including 41 Dutch Mennonites who established a semi-socialistic community in July of 1663. They, too, were

under the supervision of local officials appointed by the burgomasters of Amsterdam.

English hegemony of the region began in 1664 when Sir Robert Carr attacked the Dutch settlement at New Amstel on behalf of James Stuart, Duke of York, brother to Charles II. This attack was an important move on England's part to secure her economic position in the New World. New Amstel, renamed New Castle, was sacked by English soldiers and sailors who plundered the town, and English officers confiscated property and livestock, as well as the personal property and real estate owned by the local Dutch officials. A transfer of political authority from Dutch to English then followed, and the Dutch settlers who swore allegiance to the English were allowed to retain their lands and personal properties with all the rights of Englishmen. Former Dutch magistrates continued in office under English authority, and Swedes, Finns, and Dutch alike peacefully accepted the rule of the Duke of York through his appointed governors.

In 1671, the Duke of York made the first land grants in the area of present Kent County. By 1679, 53 grants had been made. With water transportation the major mode of travel and commerce in the late seventeenth century, most of the lands granted in Delaware had frontage on a navigable stream or waterway. In Kent County, twenty-one of the 53 grants made by 1679 were along the St. Jones River.

Overland travel was extremely difficult in the region throughout the seventeenth and eighteenth centuries with heavily wooded and marshy areas constituting major obstacles. The

sparseness of the population and corresponding lack of accommodations for travelers added to the discomfort and dangers of overland transportation. In 1680, people living in the upper part of Kent County, then part of Whorekill County, petitioned Governor Andros to create a new, smaller county to be called St. Jones County. In 1682, William Penn was granted proprietary rights over Pennsylvania and the Lower Three Counties which included all of modern Delaware. Relations with Pennsylvania deteriorated and boundary conflicts soon developed in St. Jones County, renamed Kent by 1683. The border with New Castle County was Duck (Smyrna) Creek, but as the creek did not extend very far to the west, the western part of the boundary was left undefined. Even more significant were rival claims by the Calverts in Maryland. The Delaware-Maryland border, particularly along northern Kent County, was hotly disputed until it was permanently fixed in 1765.

Waterways were important to transportation and commerce as early roads were limited in number and of poor condition. The few existing roads led to landings on rivers and the Delaware Bay where produce and goods were shipped by cheaper and more efficient water transport. The Delaware River and Bay served as a major focus of water transportation because the majority of Delaware's streams flow eastward to these bodies. For this reason, the large port city of Philadelphia, and to a lesser extent Wilmington and New Castle, exerted major commercial influence on the Delaware counties throughout the eighteenth century and later. Wilmington, New Castle, and Lewes were also ports for ocean-going vessels involved in export trade. Overland

transport was limited to a few major roads, such as the eighteenth century post road connecting Philadelphia-Wilmington-New Castle-Odessa-Middletown-Dover-Lewes with a western branch at Milford linking it to the Chesapeake Bay. Small secondary roads and paths interconnected numerous villages and hamlets and were relatively common within the study area.

One reason for the relatively slow growth of Kent County beyond the St. Jones River drainage was a lack of any extensive network of navigable streams or good roads in the western part of Kent County. Land north and west of the navigable portions of Duck, St. Jones, Little and Murderkill Creeks, were more sparsely populated than other areas in Kent County because of the importance of water transportation in the cheap movement of bulky agricultural products.

In an attempt to improve the roads in the Lower Counties, the General Assembly in 1752 and again in 1761 called for the repair of the "King's Road" between the New Castle-Kent County border and Lewes which was present in the 1680s. The eighteenth century laws called for the road to be 40 feet wide with all but ten feet cleared. Secondary roads of 30 feet in width and all but ten feet cleared were also to be constructed. From Salisbury (just north of present day Smyrna and later known as Duck Creek Village) along the New Castle-Kent County border, the post road continued south through Dover, Camden, Milford and Frederica, eventually to reach Lewes and the Maryland border (Laws of the State of Delaware 1797:320, 390-394).

By the middle of the eighteenth century, population increases and commercial expansion stimulated the growth of towns and the development of transportation and industry. Dover and Smyrna emerged as the two largest towns in Kent County, with markets, landings, and central locations attracting new settlers. The population of Kent County in the study area grew through both natural increase and the continued movement of new peoples into the area from Maryland, Pennsylvania, the other two counties of Delaware, and from Europe, particularly Great Britain. A census taken privately in 1760 gave the population of Kent County as 7,000 individuals (Conrad 1908:580).

The median size of land warrants granted in 1735 in Kent and New Castle counties was between 200 and 300 acres, with the typical grant close to 200 acres (Penna. Archives 1891:193-202). Larger grants, however, were not uncommon. If New Castle County and southeastern Pennsylvania can be used as a rough comparison, the density of rural settlement in northern Kent County was approximately five households per square mile (Ball 1976:628).

Throughout the late eighteenth and nineteenth centuries, the agrarian Delmarva peninsula was considered an area of production and transshipment between the Chesapeake Bay markets (Annapolis and Baltimore) and the Delaware River and Bay markets (Philadelphia and New York). As local markets prospered, so too did the hamlets and other unplanned towns that had sprung up at crossroads and around taverns, mills, and landings. Important landings included the Brick Store, Hay Point, and Short landings along the Smyrna River; Dona, Naudain, and White Hall landings along the Leipsic River; and Lebanon, Forest, and White House

landings along the St. Jones. Landings, as well as towns and hamlets in the study area, formed, grew, and sometimes declined according to local and regional economic conditions.

Throughout Delaware's agricultural history, farm labor has been a valued commodity. In the colonial period, blacks in slavery and white indentured servants were the primary farm laborers. By the mid-eighteenth century, white indentured servants were as numerous as black slaves. Slightly less than one-half of the blacks in the state in 1790 were free; however, by 1810, less than one-quarter of blacks were slaves according to federal censuses. Free black labor played an increasing role in farm production in Delaware as ethical and economic factors reduced the profitability of slavery prior to the Civil War. After Emancipation, black labor continued to be a significant factor in farm production.

According to the 1810 national census, the population of Kent County was 20,495 persons. Marginal farm lands were being increasingly settled since good, well-drained lands with access to markets were becoming more scarce. The move inland from navigable waterways apparent by the late eighteenth century began with the influx of new populations, particularly from England. This period of growth from the late eighteenth to early nineteenth centuries, however, was short-lived with the population of Kent County actually decreasing in the late 1810s to the 1830s. By 1840, the population of Kent County, according to the national census, had declined to 19,872 persons. Given the natural increase of the population that remained in Kent

County during this period, the number of people leaving and "passing through" the county is even greater. The rapid population growth of the first decades of the nineteenth century in Delaware also forced many farmers off the land. Competition for prime land forced many new farmers to clear and till land of poor or marginal quality. Many of these farmers were then hard pressed to turn a profit from their farmsteads and thus became part of the outward migration from Delaware.

A decline in wheat prices and increased competition for good land was accompanied by a significant decrease in the fertility of agricultural lands throughout the state. Poor farming methods, erosion, and simply exhausted land contributed to the economic woes of Delaware farmers. Increased opportunities in urban areas and the West also served to draw people from Delaware, and Kent County in particular. As more and more people left Delaware, the resulting labor shortage made the cultivation of marginal and exhausted lands even less profitable. Thus, even more people moved away from Kent County.

The economic crises of the first decades of the nineteenth century helped to spur the beginning of an agricultural revolution throughout Delaware. The first agricultural improvement society in Kent County was formed in 1835. The discovery of marl, a natural fertilizer, during the construction of the Chesapeake and Delaware Canal in the 1820s enhanced the productivity of Delaware agriculture. The opening of the canal in 1829 further encouraged the production of market-oriented crops by providing for more efficient transportation of perishable goods. The opening of the Philadelphia, Wilmington

and Baltimore Railroad in 1839 complemented existing water-based transportation systems and provided transportation of northern Delaware produce to the growing eastern markets. When the Delaware Line extended rail service to Dover, and later Seaford, in the 1850s, a vast agricultural hinterland was opened and agricultural production for markets increased significantly.

Prior to 1832, Delaware's agricultural products were primarily grains. Fruit and vegetable crops were of lesser importance. Nonetheless, from the 1830s to the 1870s, Delaware was the center for peach production in the eastern United States. Rich soil, favorable climate and rainfall, excellent transportation facilities, and strategic locations near large markets made peach production a lucrative enterprise. The peach industry was hindered in Kent and Sussex counties until the 1850s due to transportation limitations. Early attempts there failed because producers could not move fruit to market economically. Rail service into the area and the absence of the peach blight in the southern counties made peaches profitable into the 1870s. By the end of the "peach boom," massive harvests were being shipped by rail and steamship lines to New York where the produce was readied for resale to the northern states. The spread of a disease known as the "Yellows" devastated orchards throughout the state and brought an end to the boom. However, until the peach blight curtailed production, the peach industry proved profitable for a large number of peach growers, as well as a variety of support industries.

Throughout the nineteenth century, and into the twentieth, agriculture in Delaware continued to focus on perishable products with a decrease in staples. More diverse crops, including tomatoes, apples, potatoes, and truck produce became more common in response to the demands of markets in New York, Philadelphia, Baltimore, and other cities. The number of acres cultivated in Kent County rose from approximately 283,000 acres in 1850 to 338,000 acres by 1900. Poultry and dairy production also increased significantly in this period in Delaware, particularly in Kent and Sussex counties. Concurrent with the rise in importance of truck crops and dairy products in the late nineteenth century was the improvement of transportation throughout the state. The completion of the Delaware Railroad trunkline through to Seaford in 1856 encouraged the production of such goods by providing quick and cheap access to regional markets. Prior to the Delaware Railroad, steamboats and other water craft provided areas of Kent County with cheap and efficient transportation.

Tenant farming, which had been common in the eighteenth century, became even more prevalent in the nineteenth century. Large landowners, having acquired much of their holdings during the hard times of the 1820s and 1830s, leased their land to tenants. Most of the landowners and tenants were white, although a number of tenants and farm laborers, particularly in Kent and Sussex counties, were black. By 1900, over 50 percent of all farmers in Delaware were tenants or sharecroppers. Sites associated with agricultural tenancy comprise a significant number of the historic archaeological and standing structure

resources identified along the southern Route 13 Corridor. Tenancy remained a dominant farming practice into the twentieth century, with almost 50 percent of the farmers in Kent County being tenants in 1925.

The agricultural trends identified in the late nineteenth century continued relatively unchanged well into the twentieth century. Corn and wheat declined in importance due to competition from the western states. By 1880, alfalfa, legumes, and truck crops were increasing in importance, and by the mid-twentieth century had become more profitable than wheat. Dover was still the largest city in Kent County, although smaller than Wilmington and Newark.

The late nineteenth and early twentieth centuries also saw the increasing commercialization of southern New Castle and Kent counties. Light manufacturing, including carriage making and cabinet making, and foodstuff processing, including canning and juice/syrup production, became an important part of the Delaware economy. Smyrna and Dover were the sites of most of this commercial and manufacturing activity, although other areas including Camden-Wyoming and Frederica were involved.

The late nineteenth century also saw the continued growth of different ethnic communities in Kent County, particularly of Amish and Mennonites in the area west of Dover and of "Moors" in the Cheswold area. A number of prosperous Amish and Mennonite farms still exist near Fork Branch. The "Moors" of Delaware are a group of people who claim a common descent from a number of Black, Indian, and European ancestors. Until the early twentieth

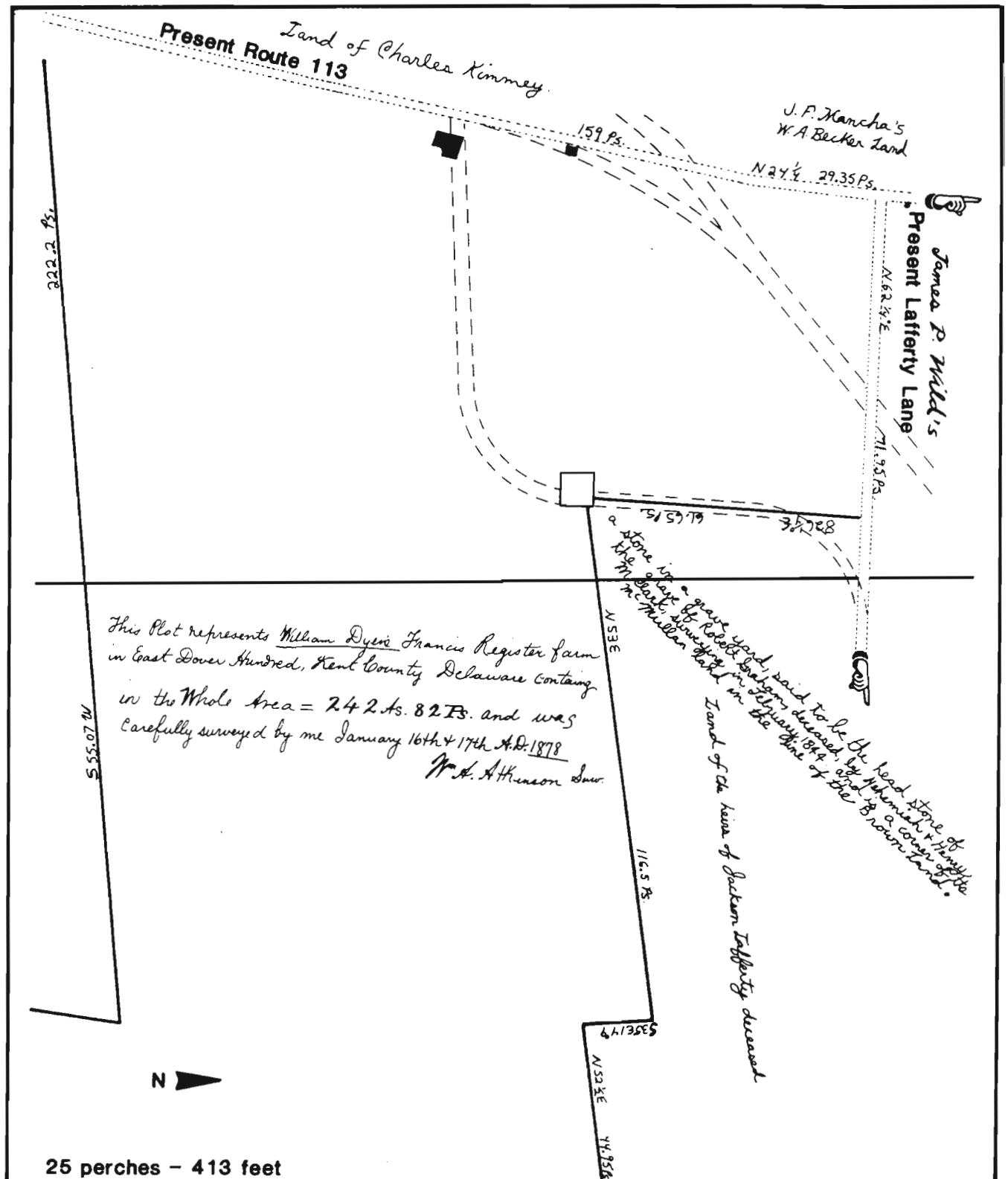
century, the Moors maintained their own schools and in World War I and II insisted on being listed as a separate race. As with the Amish and Mennonites, the Moor community exists today.

The patterning and density of settlement in Delaware, and the study area specifically, have been strongly influenced by several factors throughout its history: 1) an agrarian economy; 2) the commodity demands of large markets, first Europe and the West Indies, and later domestic commercial-industrial centers, and 3) transportation facilities. The completion of the Dupont Highway in 1923 linked the northern and southern sections of the state and helped to complete the shift in agricultural production towards non-local markets and open new areas to productive agriculture. Improved transportation in the twentieth century also brought a decline in the importance of the many small crossroad and "corner" communities that had sprung up in the late eighteenth and nineteenth centuries.

BACKGROUND RESEARCH

The possible existence of an unmarked cemetery in the path of the proposed realignment of Lafferty Lane was revealed during a routine archival investigation of the proposed right-of-way. The Hopkins Plots Collection at the State Bureau of Archives in Dover, Delaware contained an 1878 plot of William Dyer's 242 acre farm (formerly the Francis Register farm). The Hopkins Plot (Figure 4) noted one corner of the property with this caption: "a stone in a grave yard, said to be the headstone of the grave of Robert Graham, deceased, by Nehemiah & Henry M. Clark, Surveyors in February 1844 - and is a corner of the McMullen tract in the

FIGURE 4
Lafferty Lane Cemetery Location on
1878 Atkinson Survey



line of the Brown tract."

A second reference to the presence of a cemetery at this location came from a deed transferring 8 acres, 54 perches of land from James McMullen, yeoman [farmer], to Robert Graham, webster [weaver], May 17, 1804. One of the boundaries was given as "...a stake in brown's (sic) graveyard standing about a north course from a hickory in sd. graveyard..." (Kent County Deeds H-2-232).

A final reference to the presence of a cemetery at this location was found in Kent County Deed R-2-462 (Jan. 21, 1818). In this deed, Arthur Johns transferred 12 acres to James McMullen and his wife and one of the property corners was described as "... a corner on Robert Graham's grave... " Based on these three references, it was concluded that research into the Brown and Graham families and their descendants was critical to the understanding of the site. To this end, various public records were consulted in order to gather information about these families. These records included census data, deeds, orphan's court cases, tax assessments, and other records. The results of this research are presented in the following sections entitled "Land Records" and "Genealogical Reconstruction".

LAND RECORDS

A title search of the property (Figure 5) revealed that the cemetery location was part of a 400 acre parcel called "Aberdeen" originally warranted to Thomas Clifford on January 2, 1678/9 (KCD B-1-137). Over the course of the next 60-70 years, the land was divided and reformed under various owners who generally possessed

FIGURE 5

Summary of Deed Transactions

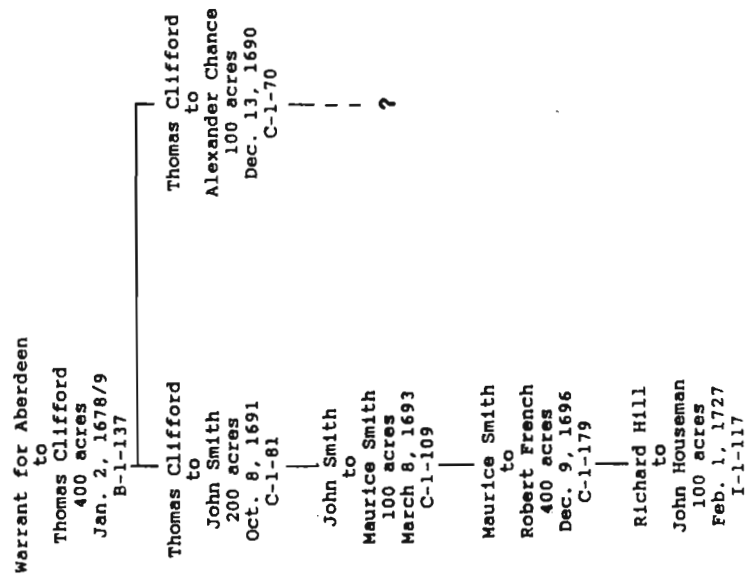
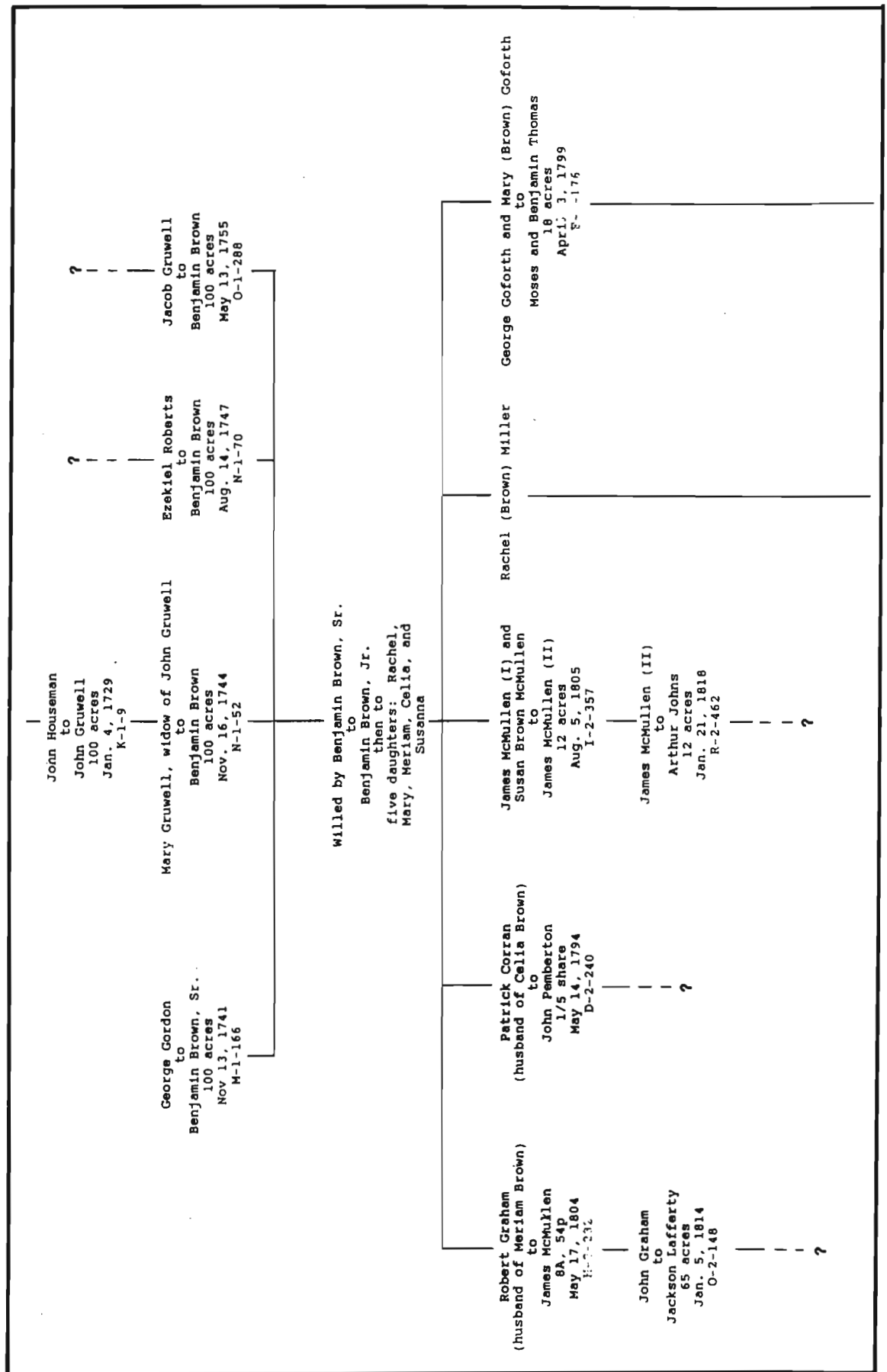


FIGURE 5B



```

graph TD
    Z["Zadock Townsend and  
Thomas Brown  
15 acres  
Jan. 22, 1810  
M-2-99"]
    J["Jonathan Brown  
Jonathan Manlove,  
Sheriff  
to  
Dr. John Brinckle  
100 acres  
Aug. 8, 1804  
H-2-293"]
    W["William Saulsbury,  
Sheriff  
to  
Edward N. Barber  
158 acres  
May 3, 1824  
X-2-132"]
    Jm["James McMullen  
Thomas Candy  
John Brown  
Edward N. Barber  
40 acres  
March 19, 1825  
Y-2-185"]
    B["Benjamin Thomas  
to  
Thomas Brown  
18 acres  
Nov. 30, 1810  
M-2-74"]
    Jm --- Z
    Jm --- J
    Jm --- W
    Jm --- B
    J --- Z
    J --- Jm
    J --- W
    J --- B
    W --- Z
    W --- J
    W --- Jm
    W --- B
    B --- Z
    B --- J
    B --- W
    B --- Jm

```

FIGURE 5D

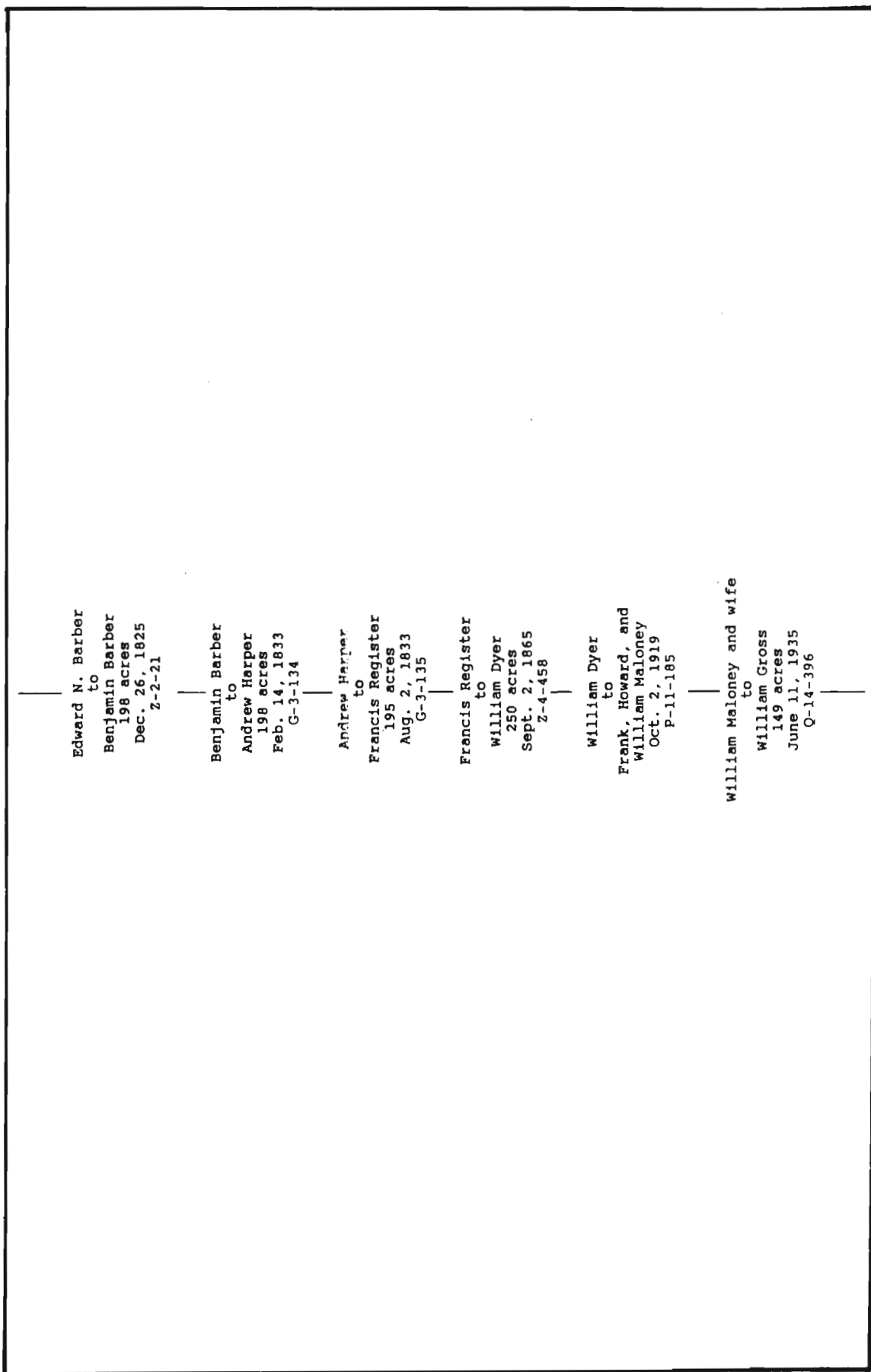


FIGURE 5E

<p>William Gross and Anna W. Gross to George C. Rothwell and Neva, his wife 149 acres June 8, 1945 P-17-109</p>	<p>George C. Rothwell and wife to Harold Rau and wife 149 acres May 22, 1950 Y-18-394</p>	<p>Harold J. Rau and Norma B. Rau to Eleanor Davis 149 acres March 7, 1951 F-19-156</p>	<p>Eleanor Davis to Harold J. Rau and Norma B. Rau 149 acres March 7, 1951 F-19-159</p>	<p>Harold J. Rau and Norma B. Rau to James Julian Inc. 6 acres April 8, 1959 A-22-488</p>	<p>Harold J. Rau & Norma B. Rau to James Julian Inc. 89 acres Nov 4, 1959 F-22-282</p>
---	---	---	---	---	--

one or more 100-acre parcels of the original 400 acre Aberdeen tract. None of these records gives specific improvements made to the properties and never is there a mention of a cemetery plot.

Benjamin Brown, yeoman of Kent County, purchased a one-hundred acre parcel from George Gordon on November 13, 1741 (KCD M-1-166). The deed mentioned that his was part of a larger tract called Aberdeen originally set off to Thomas Clifford. Brown bought three more 100-acre parcels in the ensuing years from Mary Gruwell (also spelled Grewell) (KCD N-1-52, November 16, 1744), Ezekiel Roberts, bricklayer, (KCD N-1-170, August 14, 1747), and Jacob Gruwell (KCD O-1-288, May 13, 1755) (Figure 6). Brown had apparently changed his occupation before 1744 because these last three transactions list him as a bricklayer. Benjamin Brown had amassed a 400 acre tract, including much of the original 400 acre Aberdeen tract, and it is presumed he had been living on the property since 1744. Benjamin Brown's will, probated July 14, 1768, stated that his son Benjamin, Jr. was to receive the "dwelling house and plantation which I bought of Mary Grewell part of Aberdeen...." Brown's 400 acre tract was divided among his heirs in the decades after his death in 1767 and the smaller parcels served as farmsteads for the descendants (Figure 7). His son, Thomas Brown, had begun to reassemble the farm under his ownership during the 1810s. At the time of his death by drowning in the St. Jones River in 1822, Thomas had amassed 158 acres of the original Aberdeen Tract.

Thomas Brown's untimely death terminated the Brown family's connection with the property. By 1833, the farm measured 195 acres and was purchased by Francis Register from Andrew W. Harper

FIGURE 6

Composite Drawing, Benjamin Brown Landholdings, circa 1764

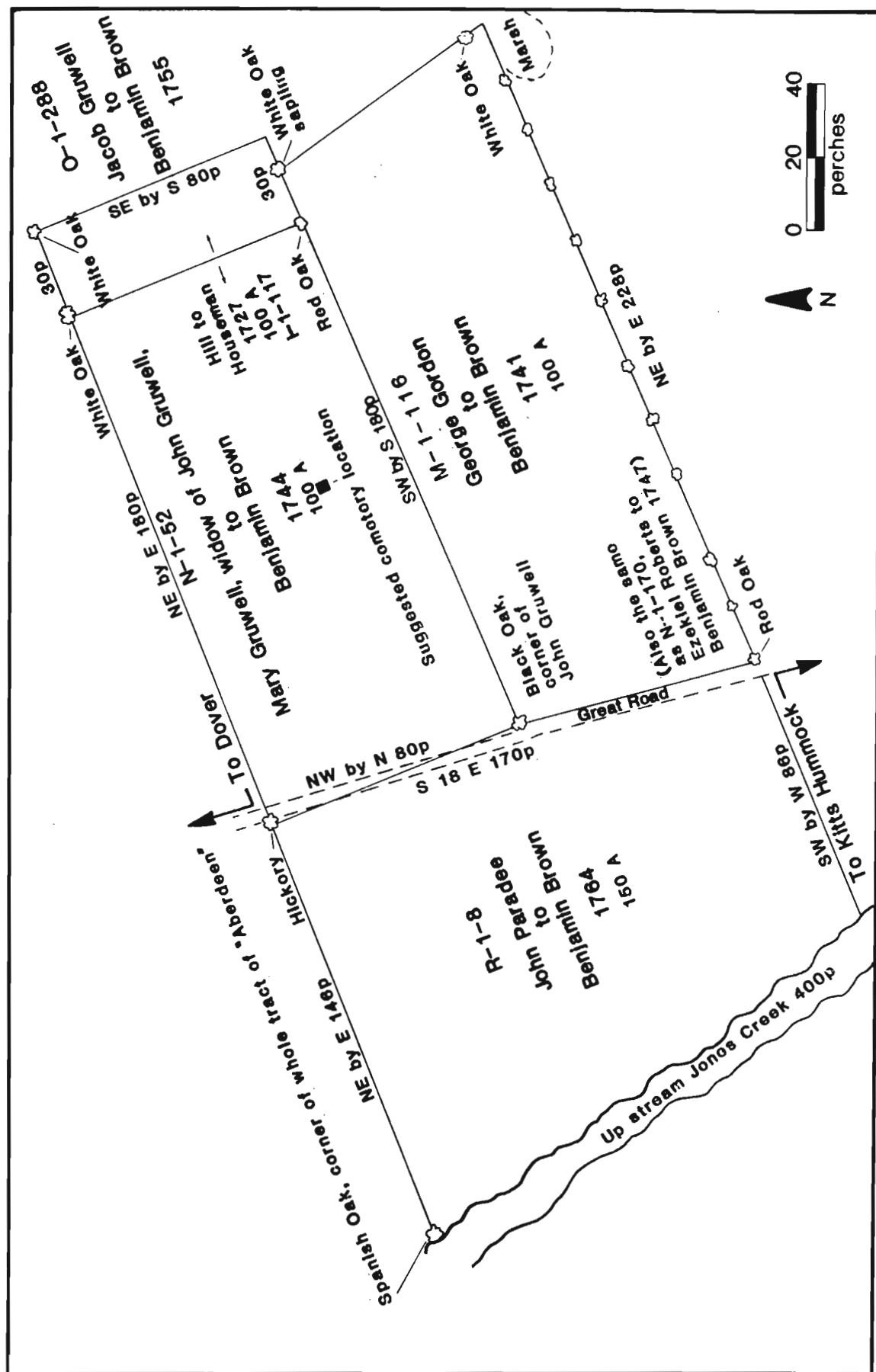
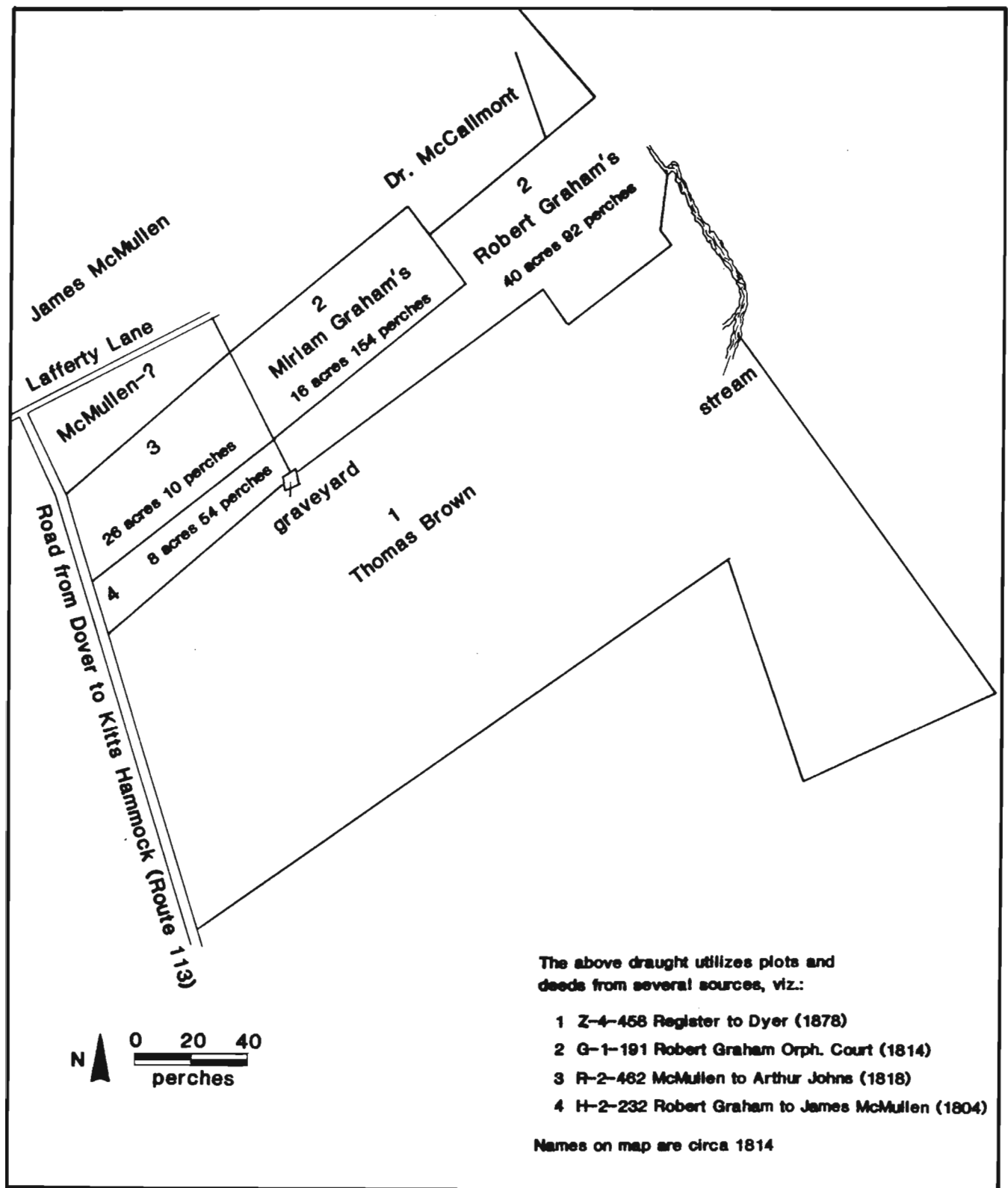


FIGURE 7
Composite Drawing, Landholdings in Graveyard Vicinity,
circa 1814



for \$900 (KCD G-3-135). Register sold the property to William Dyer in 1865 (KCD Z-4-458), and Dyer eventually amassed holdings totaling over 600 acres on both sides of present U.S. 113. An investigation of the Tatnall tombstone records shows that the Register family and all later owners of the farm were buried off the property, so although only two explicit named references to those buried in the cemetery were found (Brown and Graham), it is likely that few interments were made after Register bought the property. Thus, it is concluded that the cemetery was in use by 1767 (death of Benjamin Brown, Sr.) and was used until about 1840.

The ground surrounding the cemetery continued in use as farmland through the remainder of the nineteenth century and into the mid-twentieth century. In 1950, retired Air Force Colonel Harold J. Rau bought the property, then down to 149 acres, and eight years later sold off the U.S. 113 road frontage for businesses, and the remainder of the property to the James Julian, Inc. construction company. The land has not been farmed since 1959. It is currently a mixture of woodlots and fields in succession. The U.S. Government bought a portion of the eastern part of the farm a few years ago for the expansion of its facilities at Dover Air Force Base. Julian's subsidiary, Diversified Business Enterprises, Inc., now uses the farm as a repository for discarded construction equipment and supplies.

Maps and aerial photographs were also consulted for depictions of the cemetery either in use or as a relict feature. The 1948 U.S. Department of Agriculture flyover of Kent County showed a triangular patch of dark vegetation at the approximate

PLATE 1

1988 Aerial Photograph
of Lafferty Lane Cemetery Site



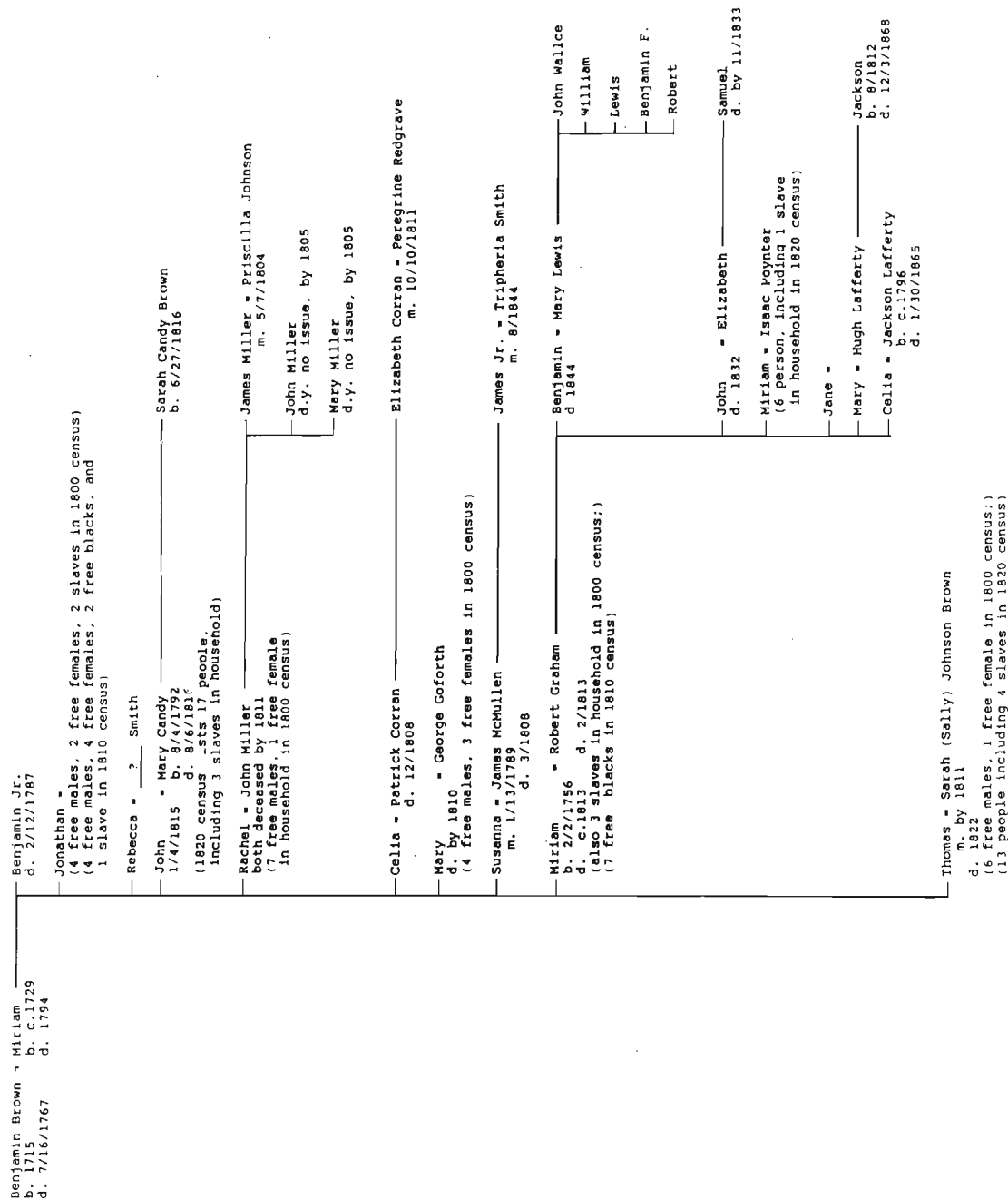
location of the Robert Graham grave on the Hopkins Plot of 1878 (Plate 1). No other graphic descriptions of the cemetery could be found.

Local residents were consulted for recollections of the cemetery, the names of those interred, or headstones with or without inscriptions. None of the employees of the current owner, Diversified Business Enterprises, had any recollection of the cemetery. The office manager, Mr. Johns, had worked at the site for much of the last 30 years and was completely unaware of the existence of a cemetery on the property. Colonel Rau died in the mid-1970s and his only known survivor, a widow from a second marriage, never lived on the property and had no recollection of the cemetery (Mrs. Harold Rau, personal communication, 1989). One informant, retired state photographer Harold Short of Dover, did provide the only known description of the abandoned cemetery. Mr. Short lived on a nearby farm from 1937 to 1946 and spent time rabbit hunting in the cemetery in the early 1940s. He recalled that the plot was heavily overgrown with honeysuckle, and in order to improve his overall visibility for hunting, he frequently sat atop an approximately 3' tall headstone which he described as the largest of several still visible among the tangled undergrowth. Mr. Short noted that several of the stones contained inscriptions, but he does not recall names or dates (Harold Short, personal communication, 1989). After military service in World War II, Mr. Short moved into the City of Dover and has not returned to the site.

GENEALOGICAL RECONSTRUCTION

After establishing that the Brown family was associated with the graveyard, an examination of archival resources was conducted in an effort to identify the potential occupants of the graveyard. From various public documents, including deeds, probate records, tax assessments, and census lists, a partial genealogy was created which may represent those people actually interred in the Lafferty Lane cemetery (Figure 8). Benjamin Brown, Sr. married Miriam _____ (born ca. 1729, died 1794), and they had 10 children: Benjamin, Jr., Jonathan, Rebecca, John, Rachel, Celia, Mary, Susanna or Susan, Miriam, and Thomas. Benjamin Brown died in 1767, and his wife Miriam remarried a local resident, Mark Maxwell. Of the children of Benjamin and Miriam Brown, Benjamin, Jr. died without issue on February 12, 1787. Rachel married John Miller and had at least three children, one of whom married. Celia married Patrick Corran and had at least one child, Elizabeth, who married Peregrine Redgrave. Mary married George Goforth and the 1800 census lists several children. Susanna married James McMullen on January 13, 1790 and they had at least one child, James, Jr. Miriam married Robert Graham and they had six children (Benjamin, John, Miriam, Jane, Mary, and Celia) and numerous grandchildren. Thirteen people, including four slaves, were living in Thomas Brown's household according to the 1820 census. Rebecca Brown married a man named Smith but nothing further is known. John Brown married Mary Candy and the 1820 census lists 17 people, including three slaves, living in their household. Jonathan's household contained 11 people, including two free blacks and one slave,

FIGURE 8
Partial Brown Family Genealogy



according to the census of 1810.

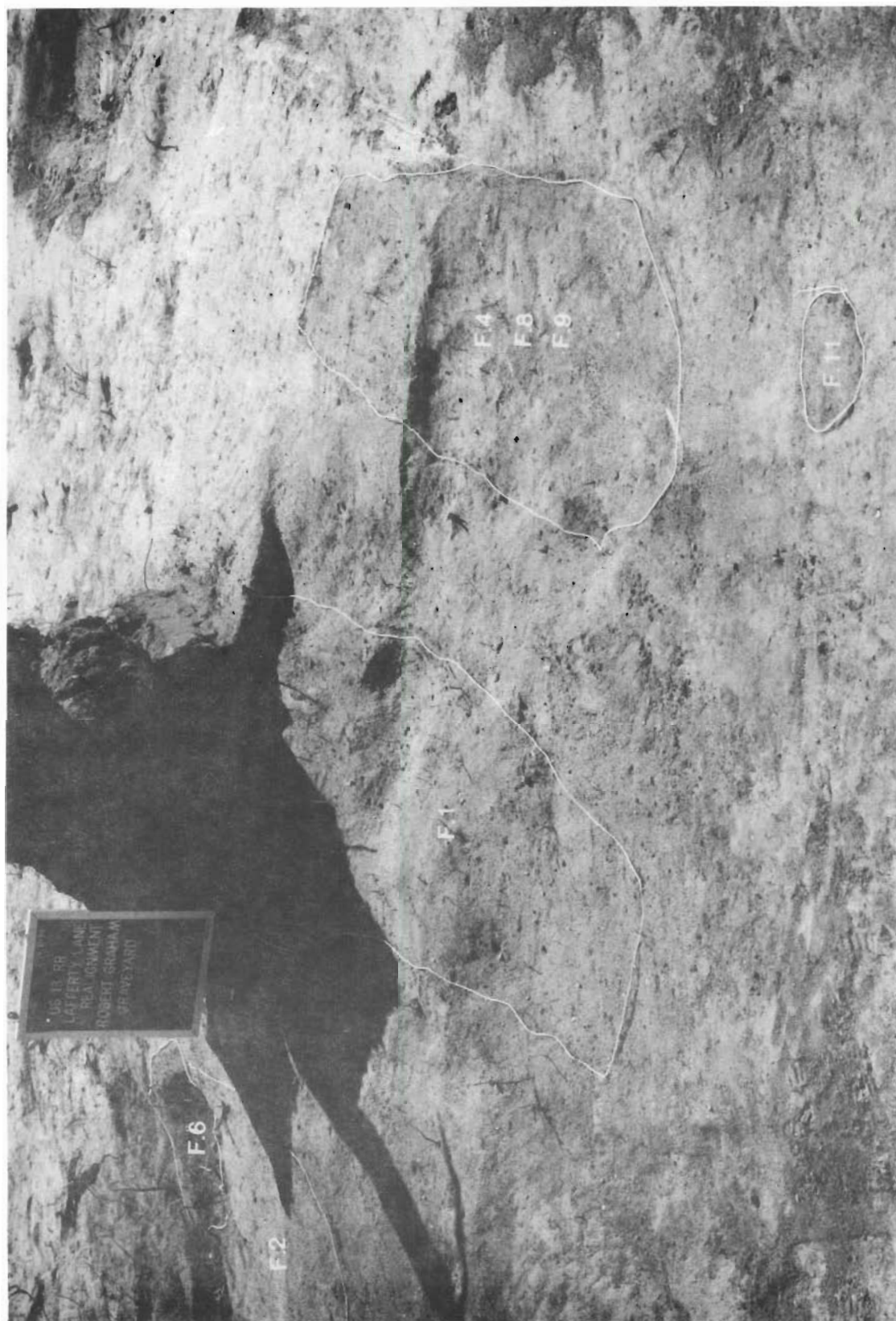
The number of known descendants of Benjamin Brown, Sr., including parts of the third and fourth generations, totals 76 and is certainly an incomplete count of the possible number of descendants for the period 1760-1840. The dates of death of most of these 76 individuals range from the 1760s to the 1830s. When other unnamed family members listed in the census schedules and free blacks and slaves listed in the census data are included, the partial list of all household members is 94. Only two of the 94 are known to be buried outside this cemetery: Jackson Lafferty I and II are buried in a churchyard in Dover (Tatnall Tombstone Index, Hall of Records, Dover).

EXCAVATION METHODS

The initial task was to locate the approximate position of the plot on the modern landscape using the 1948 aerial photograph and past and present land surveys. Fortunately, the property lines and angles dividing Dyer's from Lafferty's farms in 1878 (Figure 4) is identical to current lines, and in September 1988, the corner was marked with an iron angle. The ground surrounding the property corner was heavily overgrown with vines, shrubs, and 30' trees and nothing could be seen on the surface. A spring steel probe was employed to penetrate the brush and topsoil to locate any fallen tombstones in the vicinity of the property corner. Although numerous buried angle irons, discarded steel pipe, and concrete chunks were found in this manner, no gravestones were located. A pedestrian survey of the ground around the corner also revealed no gravestones.

Hand excavation was commenced at the property corner to verify the grave of Robert Graham, presumed to be buried here according to the 1878 survey map. Flat shovels were used to strip the topsoil and record any features encountered in the subsoil. In this fashion, Features 1, 2, 4-6, and 8-14 (Figure 9 [see pocket] and Plate 2) were exposed and delineated. After the exposure of the first graveshafts, the State Historic Preservation Officer was notified and a Discovery of Human Remains Form was submitted to his office (Appendix II). At that point, it became apparent that the true size of the cemetery may not be discerned by hand shoveling, and a DelDOT backhoe fitted with a "gradeall-like" bucket on the rear arm was employed to strip the topsoil and expose the full extent of the cemetery. This work was accomplished over a period of three weeks in October, 1988. All suspected or confirmed cultural features were mapped and photographed with cameras and a camcorder using standard archaeological techniques. Simultaneously, test excavations were conducted on Features 1 and 2 to verify that the apparent graveshafts did in fact contain skeletal remains. This testing was necessary because of the possibilities that the remains had been disinterred and headstones removed or that the normally acidic soil of the region had caused the disintegration and disappearance of the skeletal remains. The goal of the grave excavations was to expose and verify the presence of skeletal remains and to record them in situ using standard archaeological techniques. At the conclusion of the recording of all features, Features 1 and 2 were backfilled and the topsoil was replaced over the site. Subsequently, the Delaware Department of

PLATE 2
Features 1, 2, 4, 6, 8, and 9
After Topsoil Stripping



Transportation purchased the site and permanently marked the four corners so that it will be preserved.

RESULTS OF FIELDWORK

A total of 154 cultural features were uncovered at the site by a combination of hand and mechanical stripping of the topsoil (Figure 9 [see pocket], Plate 3): 116 burial features, 29 postholes and postmolds, four boundary ditches, one builder's trench for a brick vault-burial, one intrusive twentieth century trash pit, one cut granite block resting upon the subsoil, and two rodent disturbances (Table 1). Of the 116 burial feature

TABLE 1

FEATURE TYPES AT LAFFERTY LANE CEMETERY

Feature Type	Feature Numbers Assigned
Burials	116
Postholes and Postmolds	29
Boundary Ditches	4
Builder's Trench	1
20th Century Trash Dump	1
Cut Granite Block	1
Rodent Disturbances	2
Total	154

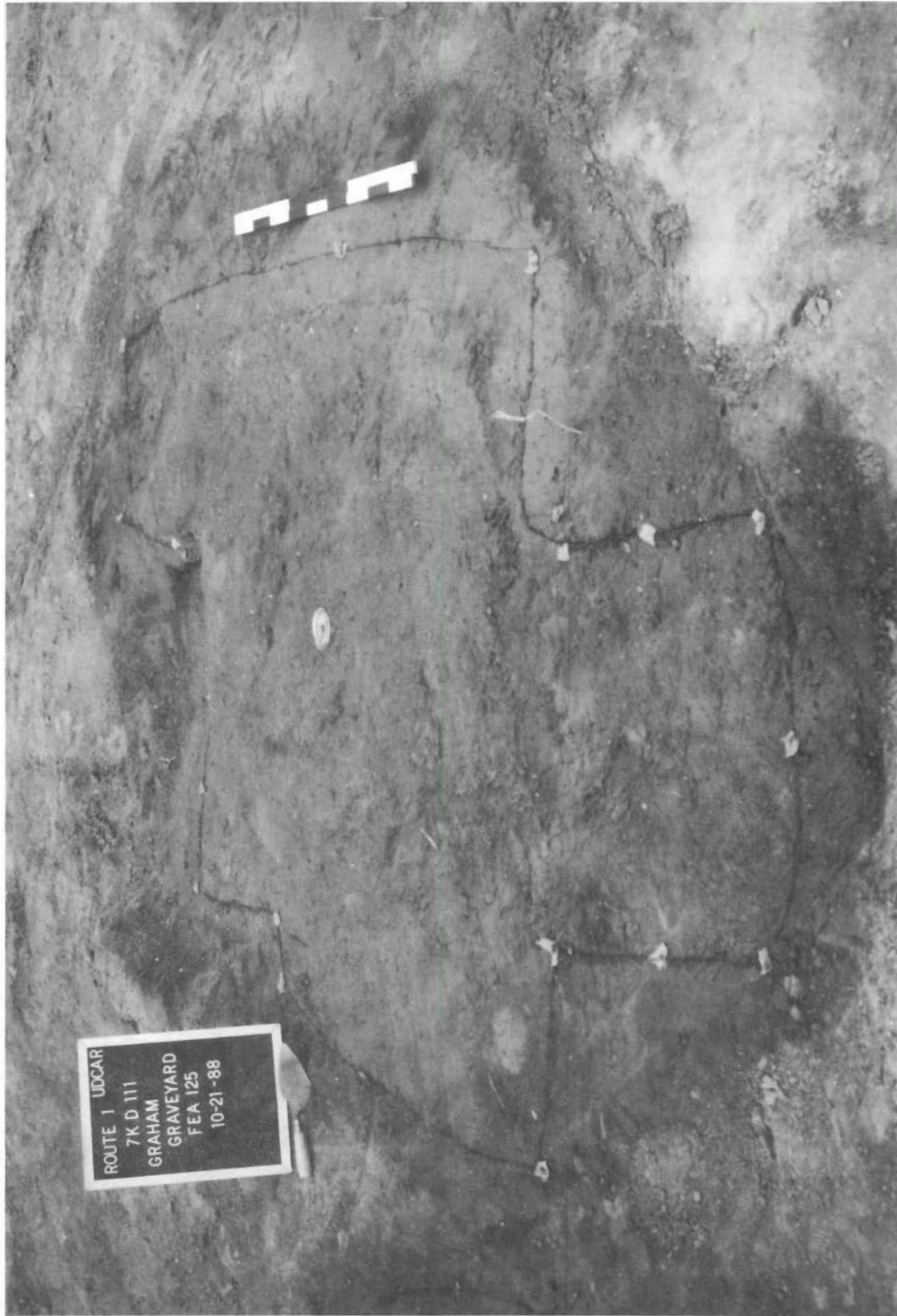
numbers, several were assigned to clusters of overlapping graves where the actual number of interments could not be clearly defined (Figure 9 [see pocket]). For example, Feature 14 measures 14' in length and 4.5' maximum width and contains at least four and possibly five overlapping graves. The organic brown feature fill contained bone fragments at the top of the fill, suggesting disturbance by later interments. The feature outline is generally angular and somewhat irregular. Barely

PLATE 3

Panorama View of Cemetery
After Topsoil Stripping



PLATE 4
Feature 125



discernible within the limits of Feature 14 could be seen the vague outline of a child burial which was labeled Feature 3. Feature 58 appears to be two overlapping graves. Features 103 and 125 (Plate 4) both appear to be three overlapping graves, each consisting of two adults and one child. When these overlapping graves are included in the total burial count, the number rises to at least 123 individuals. In addition, it should not be assumed that each individual graveshaft contains just one individual. Women and infants who died in childbirth may have been buried in the same coffin, or frozen ground conditions in winter may have made it easier to dig one shaft for multiple interment rather than two shafts for single interments. Therefore, the burial count number of 123 should be considered the minimum number of individuals represented by the graveshaft count.

The general graveshaft outline type was noted and is given in Table 2. The outline is discernible for 110 of the 123 interments and was divided into two groups: 1) hexagonal, oval, or a variation of the two (Plates 5, 6, and 7), and 2) rectangular (Plate 8). A total of 64 (58%) fell into the first category and 46 (42%) into the second.

Features 28, 31, 79, and 134 denote the sections of a boundary ditch which apparently enclosed the cemetery and provided drainage. The ditches formed an exact rectangle measuring 96' x 100' (9600 square feet or 0.22 acres). The excavated sections of the ditches revealed that they were originally about 1.0' deep and 3' to 4' across (Figure 10, Plate 9). An opening was apparent in the northwest corner of the

TABLE 2

FEATURE LIST AT LAFFERTY LANE CEMETERY

Feature Number	Feature Type	L x W Dimensions (feet)	Burial Outline Type	Adult/ Subadult	Orientation
1	Burial	7.3 x 2.0	Hexagon	A	4° SE
2	Burial	4.0 x 2.1	Oval	S	4° SE
3	Burial	4.6 x 1.3	Hexagon	S	16° SE
4	Postmold(s)	obscured by 8 & 9	-	-	-
5	Postmold(s)	1.6 x 1.5	-	-	-
6	Postmold(s)	0.6 x 0.6	-	-	-
7	Cut Stone Block	1.0 x 0.9	-	-	-
8	Postmold(s)	obscured by 4 & 9	-	-	-
9	Postmold(s)	obscured by 4 & 8	-	-	-
10	Burial	7.1 x 3.3	Rect.	A	42° NE
11	Burial	3.0 x 1.3	Rect.	S	26° NE
12	Burial	2.9 x 1.0	Rect.	S	45° NE
13	Burial	6.7 x 3.3	Rect.	A	21° NE
14	Series of overlapping graves; 3, possibly 4 graves. Irregular dimensions.				
15	Burial	2.2 x 1.0	Oval	S	1° NE
16	Burial	2.6 x 1.0	Oval	S	10° SE
17	Burial	3.8 x 1.0	Rect.	S	57° SE
18	Burial	2.6 x 2.2	Rect.	S	24° NE
19	Rodent Dist.	Irregular	-	-	-
20	Burial	4.3 x 2.0	Oval	S	11° SE
21	Burial	6.3 x 3.0	Rect.	A	9° NE
22	Burial	6.0 x 3.3	Rect.	A	20° NE
23	Burial	Truncated x 2.0	?	?	?
24	Burial	6.7 x 3.0	Rect.	A	15° NE
25	Brick Vault		Rect.		
	Burial	6.9 x 2.2	Vault	A	10° NE
26	Burial	4.8 x 1.6	Irreg.	S	8° NE
27	Burial	4.3 x 2.0	Rect.	S	52° SE
28	East boundary ditch section	30.7 x 3.3 (also 13.2 x 3.3)	-	-	-
29	Postmold(s)	1.3 x 1.3	-	-	-
30	Rodent Dist.				
31	South boundary ditch section	31.4 x 4.0	-	-	-

KEY:

L x W	= Length by Width	Dist.	= disturbance	SE	= southeast
(s)	= square	dimen.	= dimensions	NE	= northeast
(c)	= circular	Fea.	= feature		
Rect.	= rectangular	Tr.	= trench		

TABLE 2 (cont.)

Feature Number	Feature Type	L x W Dimensions (feet)	Burial Outline Type	Adult/ Subadult	Orientation
32	Postmold(s)	1.3 x 1.2	-	-	-
33	Postmold(c)	1.0 x 1.0	-	-	-
34	Postmold(c)	0.7 x 0.6	-	-	-
35	Postmold(s)	1.0 x 0.6	-	-	-
36	Burial	7.6 x 2.3	Rect.	A	4° SE
37	Burial	5.0 x 1.3	Rect.	S	26° NE
38	Burial	3.3 x 2.5	Rect.	S	26° NE
39	Burial	3.3 x 1.3	Rect.	S	1° NE
40	Burial	5.9 x 1.6	Hexagon	S	23° NE
41	Burial	6.9 x 2.0	Hexagon	A	27° NE
42	Postmold(c)	0.5 x 0.5	-	-	-
43	Burial	5.3 x 2.3	Oval	S	5° SE
44	Burial	5.0 x 2.3	Oval	S	21° NE
45	Burial	5.1 x 2.0	Oval	S	57° NE
46	Burial	5.9 x 3.0	Rect.	S	26° NE
47	Burial	6.7 x 2.0	Hexagon	A	30° NE
48	Burial	3.8 x 1.3	Hexagon	S	36° NE
49	Burial	6.3 x 1.3	Rect.	A	3° SE
50	Burial	6.0 x 2.1	Rect.	A	2° NE
51	Burial	2.6 x 2.0	Rect.	S	13° SE
52	Burial	5.6 x 2.6	Rect.	S	0° E
53	Burial	6.9 x 3.0	Rect.	A	1° NE
54	Burial	4.0 x 1.6	Rect.	S	7° NE
55	Burial	6.9 x 3.0	Rect.	A	6° NE
56	Burial	5.8 x 3.0	Rect.	A	6° NE
57	Burial	4.3 x 1.0	Oval	S	10° SE
58	Two overlapping burials, dimensions obscured, 2 rect.			?	?
59	Burial	3.8 x 1.0	Rect.	S	29° NE
60	Burial	3.0 x 1.6	Oval	S	25° NE
61	Burial	7.6 x 3.0	Rect.	A	23° NE
62	Burial	6.6 x 2.6	Rect.	A	23° NE
63	Burial	5.9 x 2.5	Rect.	S	23° NE
64	Burial	7.2 x 3.3	Rect.	A	2° SE
65	Burial	2.8 x 1.0	Oval	S	24° NE
66	Burial	all three overlap & dimen. are obscured	Probably	Probably	?
67	Burial		three	1A	45° NE
68	Burial		Hexagonal	2S	?
69	Burial	6.3 x 2.0	Hexagon	A	43° NE
70	Postmold	0.4 x 0.4	-	-	-
71	Burial	6.1 x 2.3	Rect.	A	38° NE
72	Burial	5.8 x 2.3	Hexagon	S	36° NE
73	Burial	5.1 x 1.6	Hexagon	S	43° NE
74	Burial	6.6 x 1.5	Hexagon	A	27° NE
75	Burial	3.0 x 1.3	Hexagon	S	27° NE
76	Burial	3.6 x 1.3	Hexagon	S	28° NE

TABLE 2 (cont.)

Feature Number	Feature Type	L x W Dimensions (feet)	Burial Outline Type	Adult/ Subadult	Orientation
77	Burial	6.9 x 3.5	Rect.	A	33° NE
78	Ovate				
	Postmold(c)	1.0 x 0.6	-	-	-
79	North boundary ditch section	72.6 x 3.5	-	-	-
80	Postmold(c)	0.6 x 0.6	-	-	-
81	Postmold(s)	1.3 x 1.0	-	-	-
82	Postmold(c)	1.2 x 1.0	-	-	-
83	Burial	6.3 x 2.1	Hexagon	A	6° NE
84	Postmold(s)	1.0 x 0.6	-	-	-
85	Postmold(c)	0.8 x 0.8	-	-	-
86	Burial	Truncated by backhoe	Hexagon	-	28° NE
87	Burial	7.9 x 4.0	Rect.	A	26° NE
88	Burial	6.9 x 3.3	Rect.	A	5° NE
89	Burial	6.3 x 2.0	Hexagon	A	54° NE
90	Burial	6.6 x 1.7	Hexagon	A	66° NE
91	Postmold(s)	1.0 x 0.7	-	-	-
92	Postmold(c)	0.5 x 0.5	-	-	-
93	Burial	2.1 x 0.9	Hexagon	S	29° NE
94	Burial	2.6 x 1.3	Rect.	S	34° NE
95	Burial	7.2 x 1.6	Hexagon	A	46° NE
96	Burial	4.6 x 2.0	Hexagon	S	13° NE
97	Burial	6.4 x 1.8	Hexagon	A	0° E
98	Burial	2.3 x 1.1	Hexagon	S	9° NE
99	Burial	2.3 x 0.8	Rect.	S	29° NE
100	Burial	2.3 x 1.3	Rect.	S	31° NE
101	Burial	2.6 x 1.8	Rect.	S	32° NE
102	Postmold(c)	0.8 x 0.8	-	-	-
103	Overlapping 3 graves, dimensions obscured			A	-
104	Burial	7.6 x 3.3	Rect.	A	27° NE
105	Burial	6.6 x 2.3	Hexagon	A	3° SE
106	Burial	3.0 x 1.6	Hexagon	S	27° NE
107	Burial	7.9 x 3.3	Rect.	A	11° NE
108	Burial	7.4 x 2.3	Hexagon	A	27° NE
109	Burial	6.6 x 1.6	Hexagon	A	6° SE
110	Burial	6.9 x 2.0	Hexagon	A	1° NE
111	Burial	4.6 x 1.3	Hexagon	S	3° SE
112	Burial	5.0 x 1.7	Hexagon	S	0° E
113	Burial	6.0 x 1.6	Hexagon	A	17° NE
114	Burial	6.6 x 2.0	Hexagon	A	6° NE
115	Burial	(obscured by Fea. 114)	Hexagon	-	43° NE
116	Burial	3.0 x 1.4	Hexagon	S	5° SE
117	Burial	4.6 x 1.6	Hexagon	S	3° SE
118	Burial	4.5 x 1.0	Hexagon	S	26° NE
119	Burial	5.0 x 1.3	Hexagon	S	57° NE
120	Postmold(s)	0.6 x 0.6	-	-	-
121	Burial	5.1 x 1.7	Hexagon	S	21° NE

TABLE 2 (cont.)

Feature Number	Feature Type	L x W Dimensions (feet)	Burial Outline Type	Adult/ Subadult	Orientation
122	Burial	2.1 x 1.0	Hexagon	S	14° NE
123	Burial	8.0 x 2.3	Hexagon	A	14° NE
124	Burial	5.0 x 1.5	Hexagon	S	3° NE
125	Burial	6.9 x 2.0	Rect.	A	8° NE
	Burial	7.2 x 2.1	Rect.	A	15° NE
	Burial	3.8 x ?	Rect.	S	-
126	Burial	? x 1.6	Hexagon	-	3° SE
127	Burial	7.3 x 1.7	Hexagon	A	5° NE
128	Burial	(truncated by Fea. 129)			
		? x 1.0	Hexagon	S	47° NE
129	Burial	6.8 x 2.0	Hexagon	A	11° SE
130	Burial	3.3 x 1.5	Hexagon	S	11° NE
131	Burial	6.6 x 1.7	Hexagon	A	6° NE
132	Burial	6.9 x 3.6	Rect.	A	2° NE
133	Burial	3.3 x 1.0	Hexagon	S	5° NE
134	West boundary ditch section	43.6 x 4.3	-	-	-
135	Postmold(c)	1.2 x 1.0	-	-	-
136	Postmold(s)	1.0 x 0.8	-	-	-
137	Postmold(s)	0.8 x 0.8	-	-	-
138	Postmold(s)	0.7 x 0.6	-	-	-
139	Burial	4.6 x 1.3	Hexagon	S	23° NE
140	Burial	7.3 x 1.6	Hexagon	A	24° NE
141	Burial	6.6 x 1.7	Hexagon	A	33° NE
142	Burial	3.6 x 1.5	Hexagon	S	27° NE
143	Burial	6.7 x 2.3	Hexagon	A	29° NE
144	20th Century Dump	Irregular	-	-	-
145	Postmold(s)	1.6 x 1.0	-	-	-
	Postmold(s)	0.8 x 0.8	-	-	-
146	Builder's Tr. for vault	at least 8.2 x 3.6	-	-	-
147	Possible Burial	Irregular	-	-	-
148	Burial	2.6 x 1.0	Hexagon	S	0° E
149	Burial	(truncated by dump)			
		x 2.3	Rect.	?	17° NE
150	Burial	(truncated by dump & Fea. 149)	?	-	-
151	Burial	(truncated by dump)			
		x 2.8	Rect.	A	16° NE
152	Postmold(c)	0.3 x 0.3	-	-	-
153	Burial	3.0 x 1.0	Hexagon	S	49° NE
154	Postmold(s)	0.7 x 0.7	-	-	-

PLATE 5

Feature 117, Hexagonal Graveshaft Outline

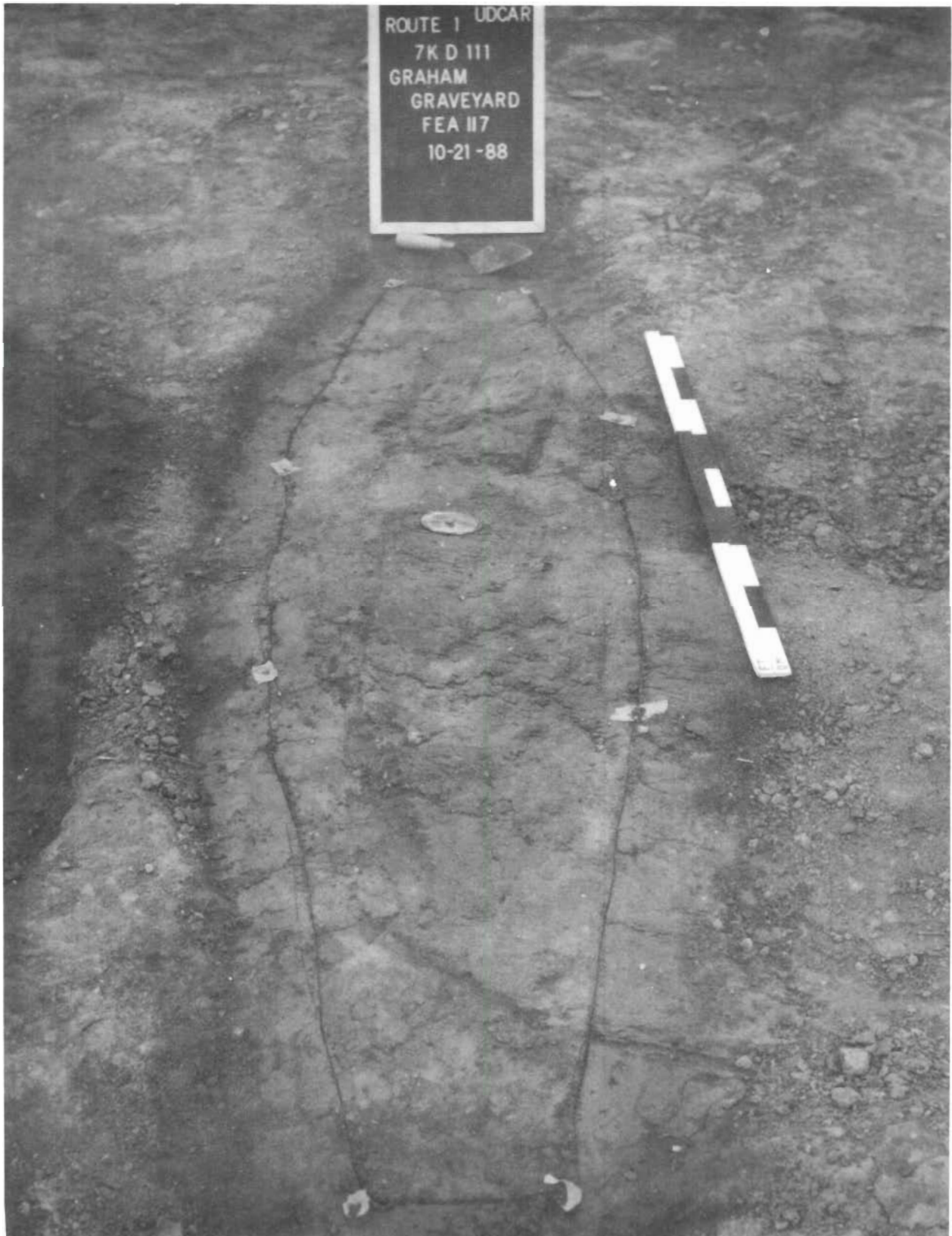


PLATE 6

Feature 142, Hexagonal Graveshaft Outline

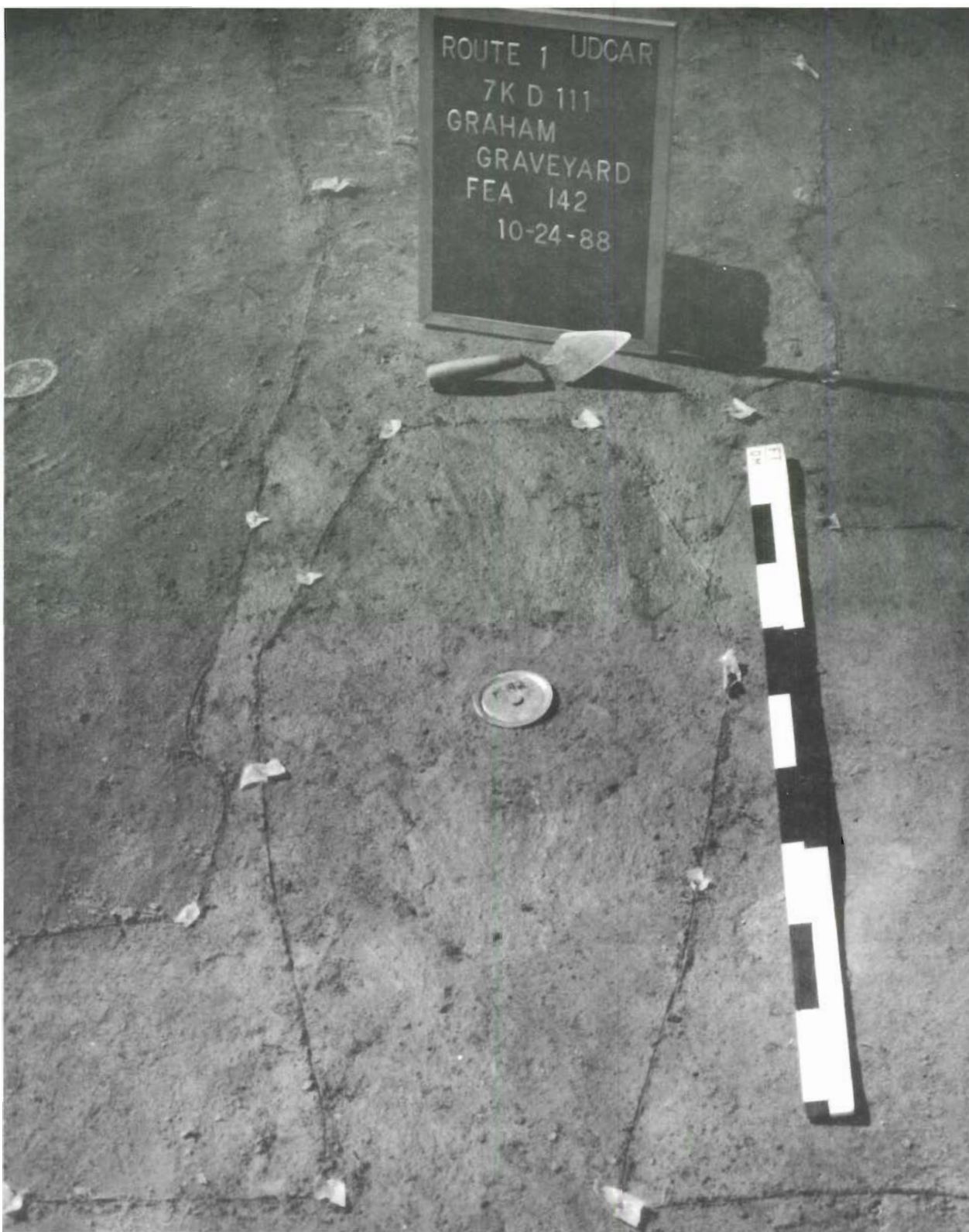


PLATE 7

Feature 44, Oval Graveshaft Outline



PLATE 8

Feature 22, Rectangular Graveshaft Outline



PLATE 9

Feature 79, North Boundary Ditch

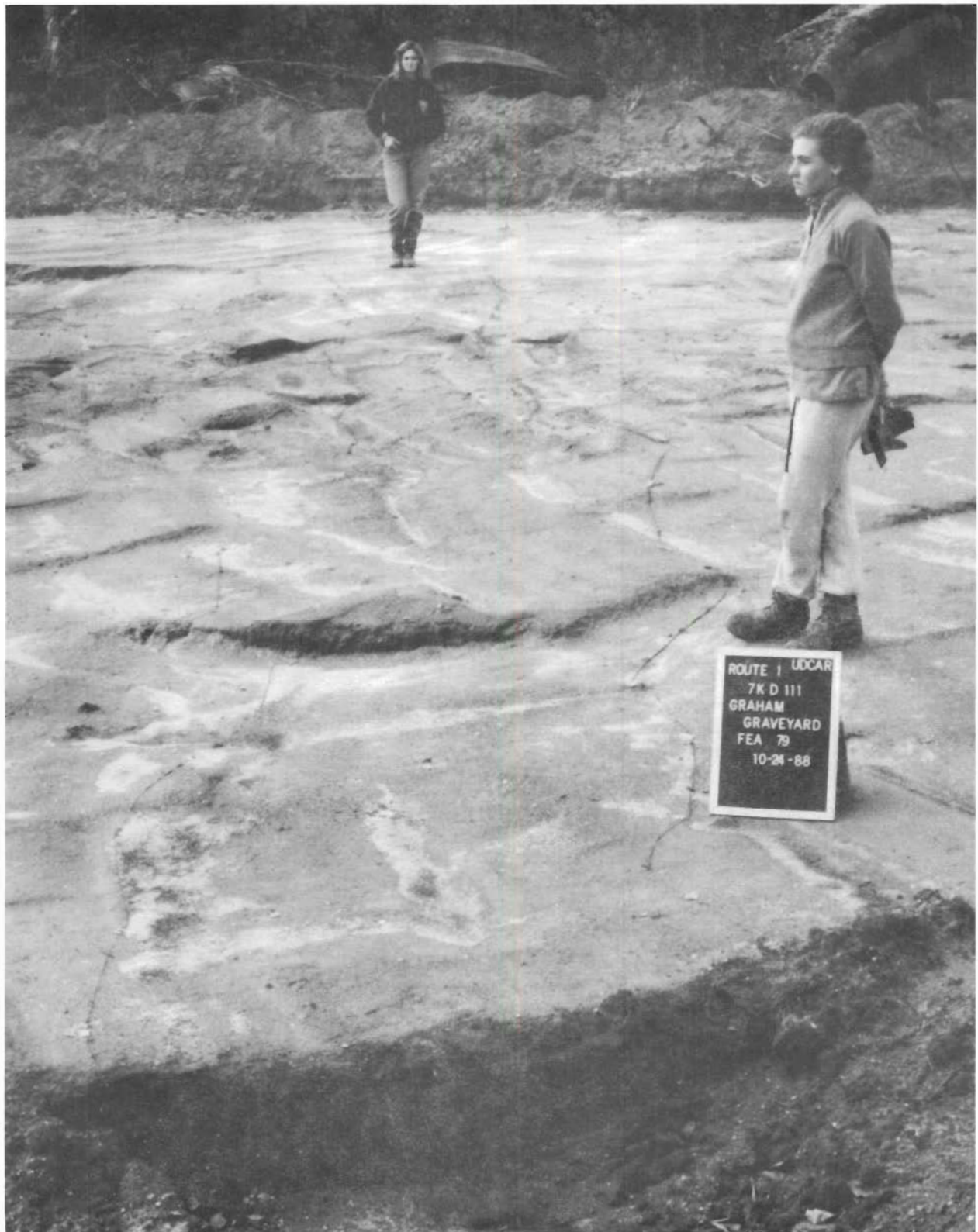
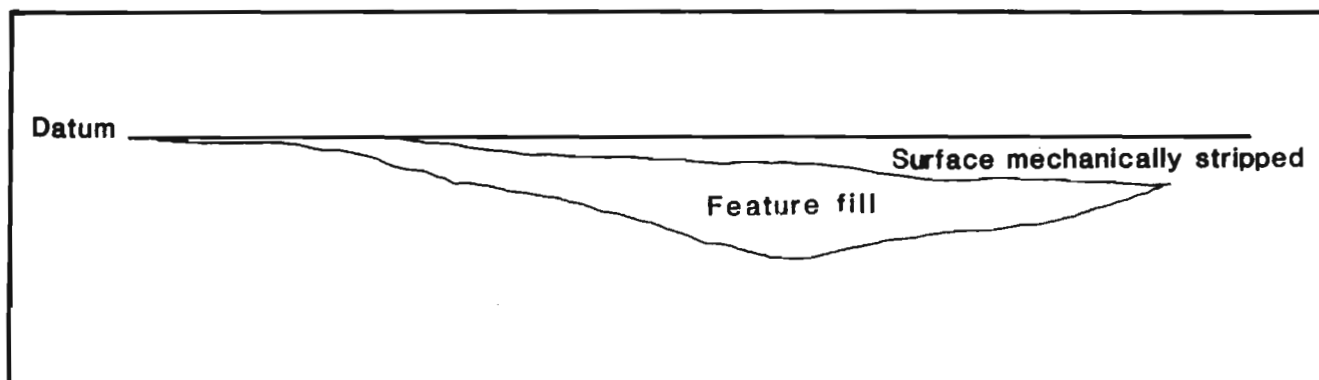




FIGURE 10

Profile of Feature 79, North Boundary Ditch



cemetery between Feature 79 and Feature 134. This gap was located at the highest point on the site and may have served as the entranceway. Since large sections of the remainder of the boundary ditch were lost through mechanical stripping, this possibility could be tested no further.

Twenty-nine posthole and postmold features were recorded from inside and outside the cemetery. Features 4, 8, and 9 were three nearly overlapping postmolds on or adjacent to the property corner described in the deeds and were found only 1.2' away from the angle post marking the current boundary. The associations between the postholes/molds and the burials will be discussed more fully below in the analysis section.

Feature number 146 was assigned to the builder's trench surrounding the brick burial vault (Feature 25) (Plate 10). Feature 144 was a large, intrusive, twentieth century trash pit located on the east side of the cemetery. This feature was partially re-excavated by backhoe and found to be bowl-shaped and about 3' deep at the deepest point. Artifacts observed from the dump fill consisted of various kinds of domestic items and

PLATE 10

Feature 25, Brick Burial Vault



farming implements including numerous machine made jars and bottles, whiteware, barbed wire, bolts, oxidized cans, an expired Delaware license plate, fragments of farm implements, and worn-out tractor tires and rims. It appears to be a general farm dump dating from about 1900 to the 1950s, and its intrusive placement into the cemetery suggests that by 1900 the exact limits of the cemetery were becoming unclear even though its general location was still known. It appears as if the original trash pit excavators encountered the brick vault because the builder's trench (Feature 146) was disturbed and the vault bricks were scarred as if struck by a heavy digging implement.

Features 1 and 2 were partially excavated to verify the presence of skeletal remains in the graveshafts. Feature 1 was excavated in nine levels to a depth of 3.6' below surface, where the top of the skull of an adult was encountered at the west end of the graveshaft. The remainder of the skeleton was not exposed, as the goal was to merely verify the presence or absence of skeletal remains. The feature fill consisted of mottled orange, yellow, and gray sands which were compacted in the upper 1.0' of the grave fill and very loose for the remaining depth. The only artifact found in the grave fill above the skeletal remains was a single fence wire staple at 0.5' below the surface (Appendix III). No wood remains or coffin stains were encountered during the excavation and it is likely that the very loose, coarse, sandy nature of the grave fill and surrounding strata contributed to the leaching away of all non-skeletal cultural remains. Two oxidized coffin nail fragments were found in the vicinity of the skull, several inches above the top of the

PLATE 11

Feature 2, Coffin Lid Nails Exposed

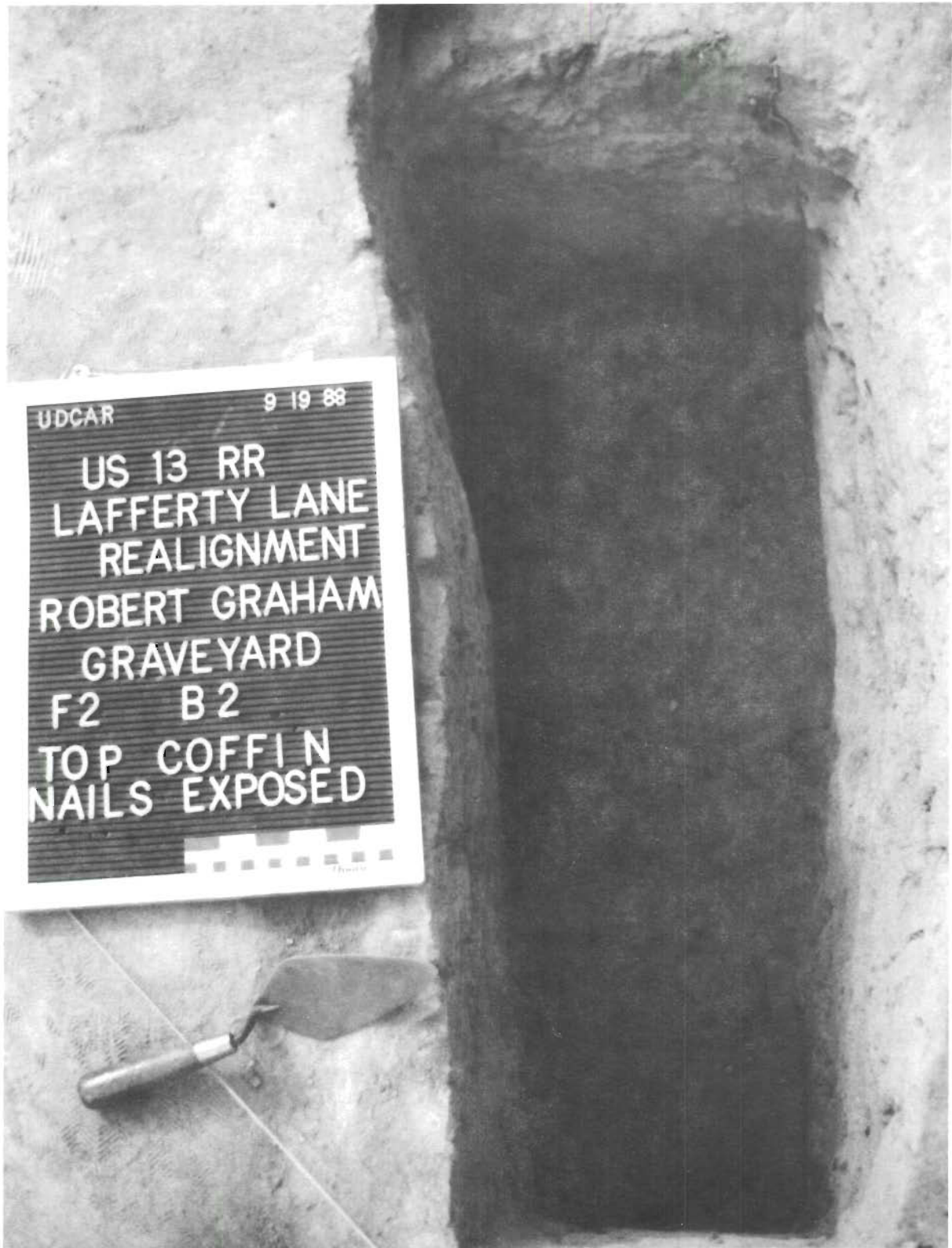


PLATE 12

Feature 2, Skeletal Remains Exposed

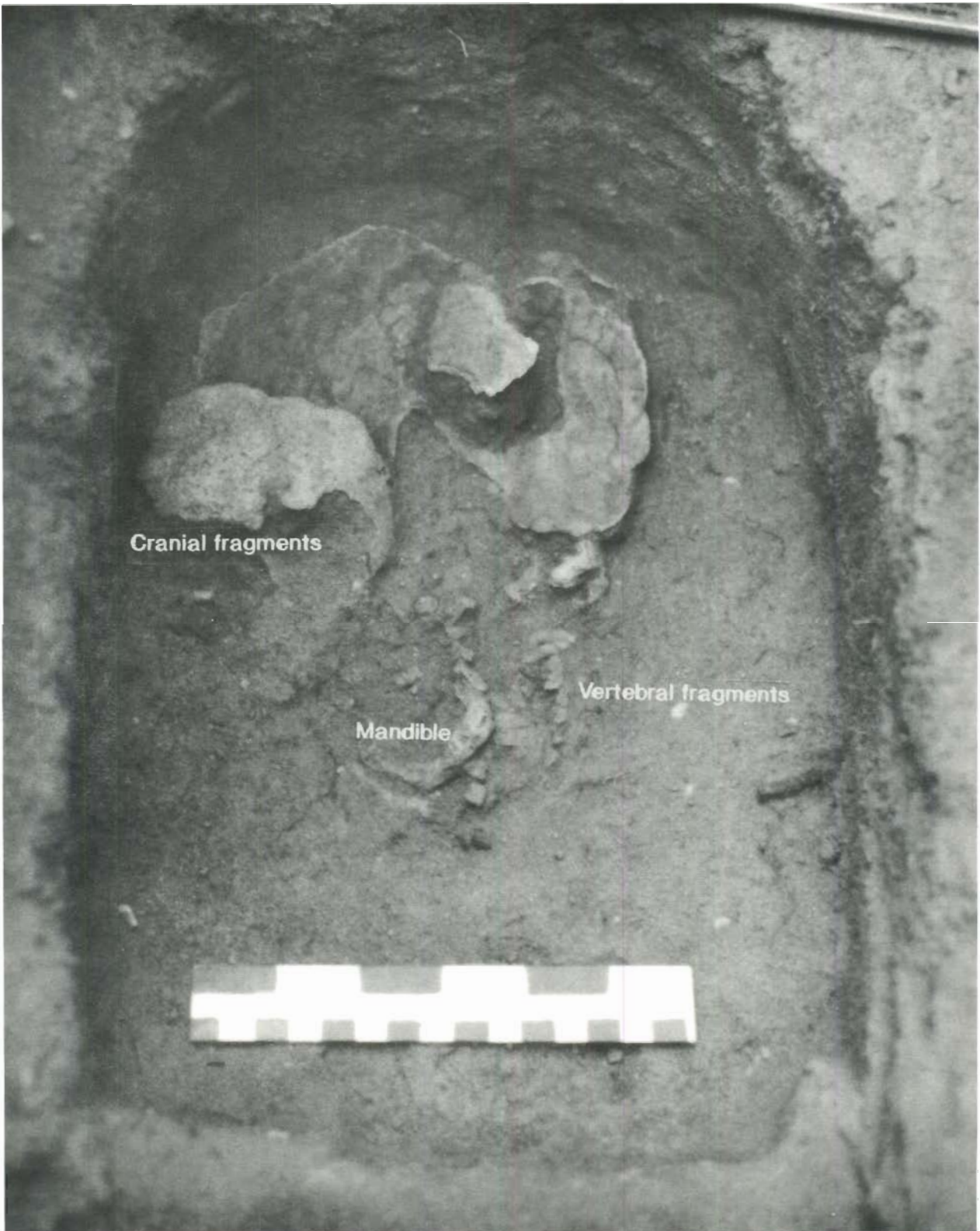
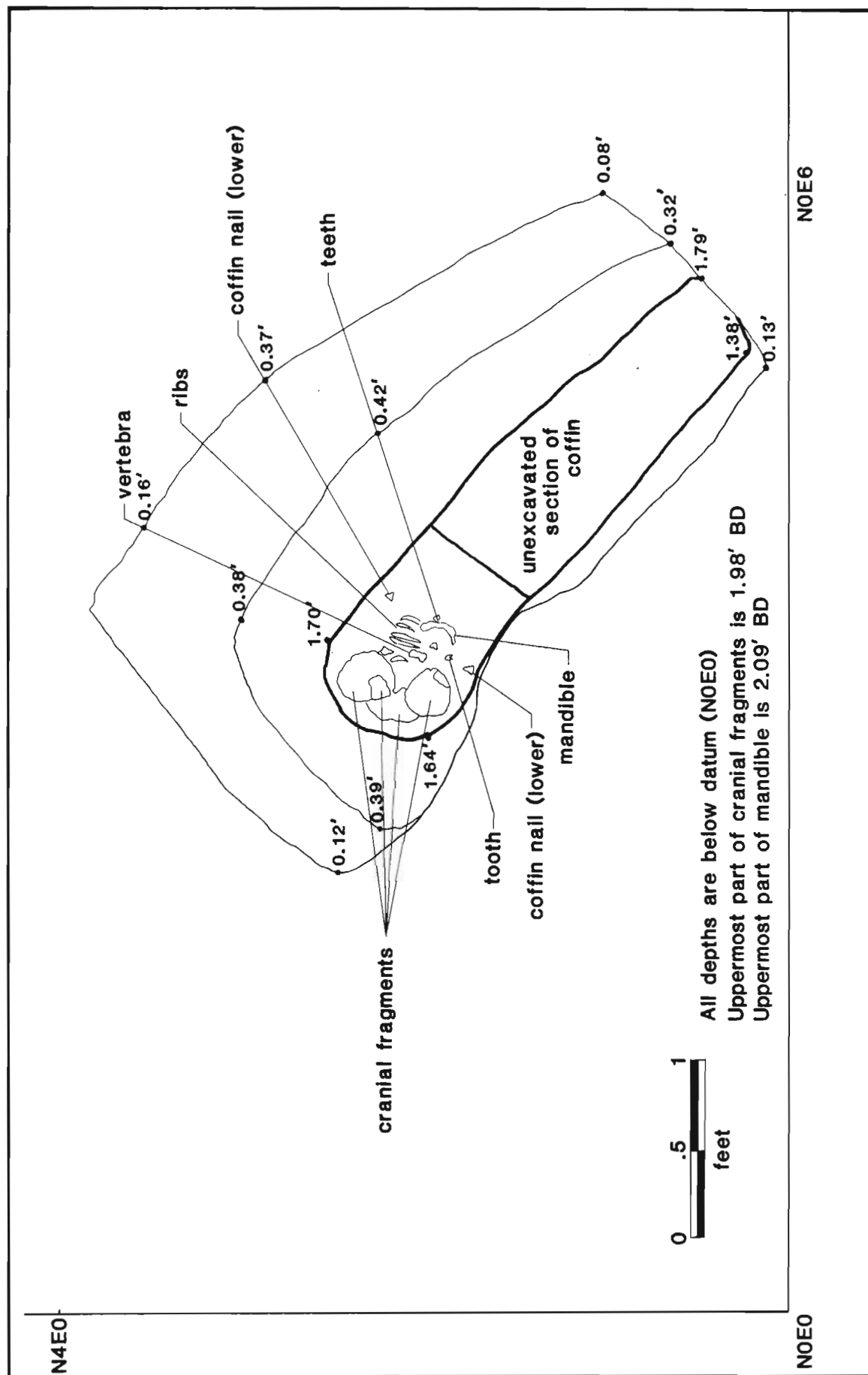


FIGURE 11

Plan View of Feature 2



cranium.

Feature 2 was more fully excavated (Plate 11) and the upper two-thirds of the skeleton were exposed (Figure 11, Plate 12). The graveshaft was excavated in nine arbitrary levels to a depth of 3.0' below surface. A graveshaft outline and the small hexagonal coffin stain were defined. The coffin stain measured 3.0' in length, 1.0' wide at the head, 1.2' wide at the breast, and 0.8' wide at the foot. Nine coffin nails were found in level 7 at 2.8' below surface and were arranged in a pattern of four evenly spaced pairs down the sides and one at the head (Appendix III). These nails are presumed to be coffin lid nails. The skeleton was that of a child who appeared to be 5-7 years of age based upon dentition, and was in fair condition. The ribs and vertebrae were present but deteriorated and the cranium had collapsed into four sections. All of the skeleton above the femora was present; that below the pelvis was not excavated.

In sum, the partial excavation of the skeletal remains in Features 1 and 2 indicated that the state of preservation in the cemetery was good and that all of the remaining graveshafts probably contained undisturbed skeletal remains.

ANALYSES AND INTERPRETATIONS

Previous archaeological analyses of cemeteries have focused primarily on two areas: gravestone architecture and ideology (McGuire 1988; Bartel 1982; Goldstein 1981; Dethlefsen and Deetz 1965, 1967), and human osteology (Dethlefsen et al. 1977; Burnston 1981; Blakely and Beck 1982; Dethlefsen and Demyttenaere 1977; Habenstein and Lamers 1955; Powell 1980; Sargent 1977).

The former are absent at this site and the latter could not be conducted because the skeletal remains were not disinterred for examination. Therefore, the analysis of this cemetery focused on the internal arrangement of the cemetery graveshafts and other features, demographic and topographic considerations of family cemetery placement on the landscape, and genealogical research leading to speculation concerning the identity of those interred within. The approach used in this report thus draws somewhat on graveyard research by historical geographers (Price 1966; Jackson 1967; Kniffen 1967; Francaviglia 1971; Jeane 1969; Stilgoe 1978; French 1975) and applies their results to an archaeological situation.

In her study of Suffield, Connecticut in the eighteenth century, Joanne Bowen (1988:164) has defined the agrarian society as a complex network of farmers, craftsmen, and laborers who formed fluid, ego-centered units that exchanged among themselves agricultural products, goods and services. The community is thus loosely bounded socially and geographically, and may have several focal points, such as individual farmsteads, service-related areas (such as landings, stores, shops, and taverns), institutional locations (such as churches, schools, or government buildings), and family cemeteries. At various times, each of these focal points may be considered more significant than the others, but they are all inter-related, and each is part of the overall agrarian community. For the purposes of this study, the Lafferty Lane cemetery can be viewed as part of an agrarian community consisting of the Brown and associated family groups, their relation to the land, and how these relationships change

over time.

INTRASITE ANALYSES

INTERNAL STRUCTURE

A total of 154 feature numbers were assigned at 7K-D-111 and are listed in Table 2. Because some graves overlapped (presumed unintentional intrusion by original grave diggers), the 116 burial feature numbers probably represent at least 123 interments. Features 14, 58, 103, and 125 can be considered unintentionally overlapping multiple interments, and these four feature numbers represent at least 11 individuals. Table 2 provides the feature type, dimensions, burial outline type, adult/subadult burial differentiation, and the long axis orientation for each of the features, where applicable. The burials ranged as large as 4.0' by 7.9' and as small as 0.9' by 2.1'.

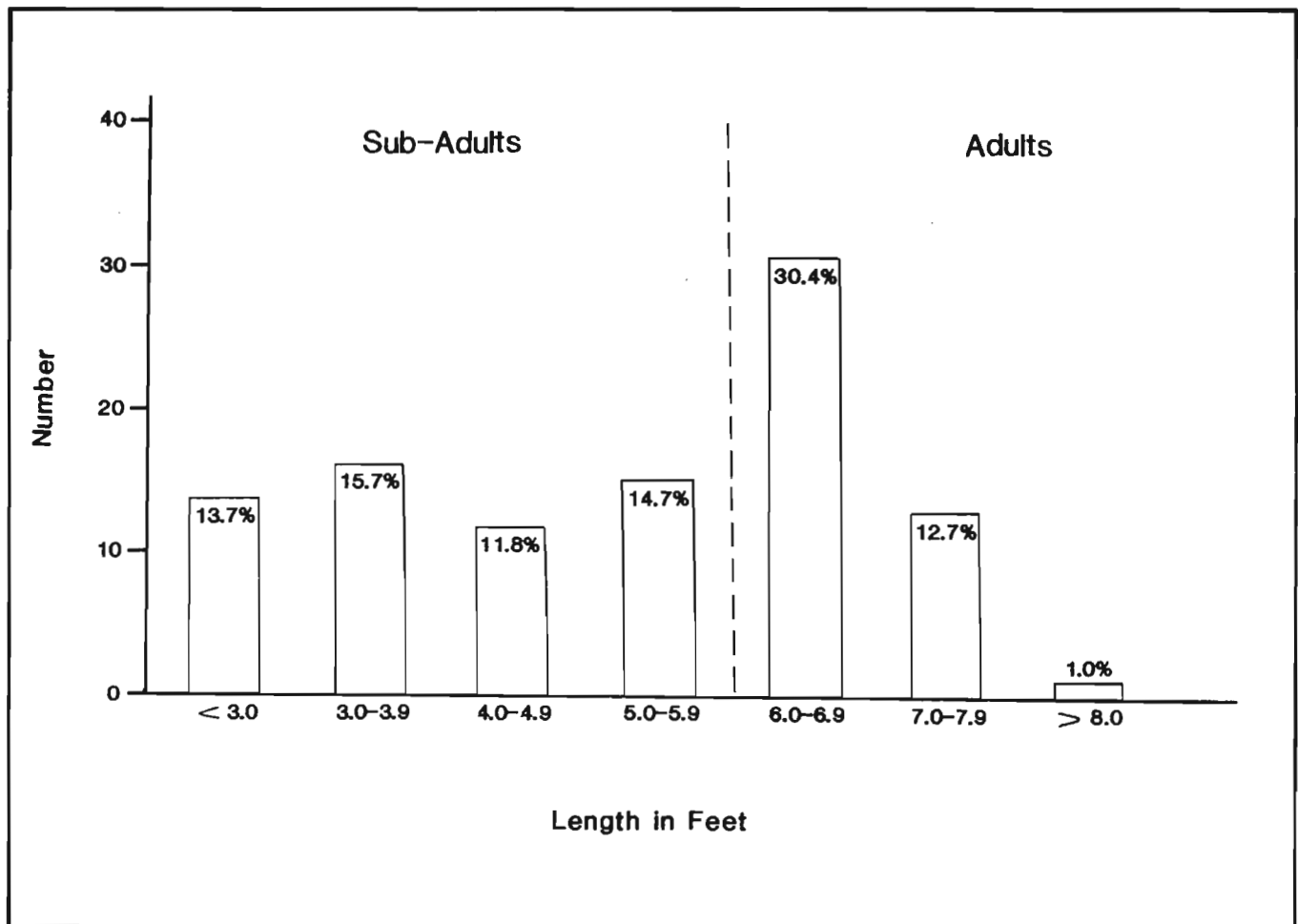
Of the 123 burial features, 109 were classified as either adult or subadult based upon the graveshaft length. Blakely and Beck (1982), in their study of Atlanta's nineteenth century Oakland Cemetery, recommend:

6' x 2' (1.8 x 0.6m) as a size by which to differentiate the graves of subadults and adults. Using this criterion, of the 204 measurable grave pits in the study tract, about 108 held subadults and 96 contained adults. Thus, roughly 53% of the dead were infants, children, and adolescents, and the remaining 47% were adults. (Blakely and Beck 1982:190).

It should be noted that a graveshaft 6.0' in length probably held a coffin of about 5.7' long. The coffin would hold a

FIGURE 12

Graveshaft Lengths in 1.0' Increments at 7K-D-111



person 5.5' or 5.6' long, so by inference, Blakely and Beck are considering adults as those individuals 5.5' and taller. At the Lafferty Lane cemetery, 50 of 109 (46%) were adults and 59 (54%) were subadults, figures which compare remarkably well with the Atlanta data (Blakely and Beck 1982:190). At the Elko Switch Cemetery in Alabama (1850-1920), 26 of 51 (51%) measurable graves were classified as subadults (Shogren et al. 1989). Figure 12 shows the relative number of graveshaft lengths in one-foot increments for 102 of the 109 graveshafts at Lafferty Lane for which specific length measurements could be obtained.

Nearly three in 10 (29.4%) graves measure less than 4.0' in length, suggesting a high death rate among small children. This phenomenon has been previously demonstrated by the data presented in the Tatnall Tombstone Index (Bureau of Archives) and by Dill (1989).

ORIENTATION

Nearly all of the graves in the cemetery are aligned in a generally east-west direction and the orientation of each was measured. In Table 2, due east is arbitrarily considered 0 degrees and the figures shown represent the deviation north of east or south of east from due east. The average bearing is 16.60 degrees north of east with one standard deviation of 19.88. The extremes are 66 degrees north of east (Feature 90) to 57 degrees south of east (Feature 17). It should be noted that the earth's axis is tilted 23 degrees, so "east" varies through one 365 day annual cycle. Thus, "east," as defined by the point on the horizon where the sun rises each morning, could be anywhere within a 46 degree span throughout the year.

GRAVE CLUSTERS

Absolute compass orientation of the grave, however, is not the only criterion for interment and actually appears to be subordinate to proximity and similar orientation (bearing) to others within a group. Of the 116 burial features present at the Lafferty Lane cemetery, 112 could be placed within one of 16 clusters as defined by orientation and proximity. These clusters are summarized in Table 3, shown in Figure 9 (see

TABLE 3

BURIAL FEATURE CLUSTERS

Cluster Number	Feature Count	Features Contained	Orientation	Adults/ Subadults (A/S)
1	8	69	43° NE	A
		71	38° NE	A
		72	36° NE	S
		73	43° NE	S
		74	27° NE	A
		75	27° NE	S
		76	28° NE	S
		77	33° NE	A
2	5	46	26° NE	S
		47	30° NE	A
		93	29° NE	S
		94	34° NE	S
		95	46° NE	A
3	3	43	5° SE	S
		44	21° NE	S
		45	57° NE	S
4	3	96	13° NE	S
		97	0° E	A
		98	9° NE	S
5	9	100	31° NE	S
		101	32° NE	S
		103	?	?
		104	27° NE	A
		106	27° NE	S
		108	27° NE	A
		113	17° NE	A
		115	43° NE	S
		139	23° NE	S
6	16	88	5° NE	A
		105	3° SE	A
		107	11° NE	A
		109	6° SE	A
		110	1° NE	A
		111	3° SE	S
		112	0° E	S
		114	6° NE	A
		116	5° SE	S
		117	3° SE	S
		118	26° NE	S
		122	14° NE	S
		123	14° NE	A
		124	3° NE	S
		126	3° SE	?

TABLE 3 (cont.)

Cluster Number	Feature Count	Features Contained	Orientation	Adults/ Subadults (A/S)
6 (cont.)	16	127	5° NE	A
7	5	66	?	S
		67	45° NE	A
		68	?	S
		89	54° NE	A
		90	66° NE	A
8	5	54	7° NE	S
		55	6° NE	A
		56	6° NE	A
		57	10° SE	S
		64	2° SE	A
9	5	49	3° SE	A
		50	2° NE	A
		51	13° SE	S
		52	0° E	S
		53	1° NE	A
10	4	40	23° NE	S
		41	27° NE	A
		48	36° NE	S
		153	49° NE	S
11	2	37	26° NE	S
		38	26° NE	S
12	4	36	4° SE	A
		39	1° NE	S
		128	47° NE	S
		129	11° SE	A
13	4	1	4° SE	A
		2	4° SE	S
		15	1° NE	S
		16	10° SE	S
14	25	3	16° SE	S
		10	42° NE	A
		11	26° NE	S
		12	45° NE	S
		13	21° NE	A
		14	?	?
		18	24° NE	S
		20	11° SE	S
		21	9° NE	A
		22	20° NE	A
		23	?	?
		24	15° NE	A

TABLE 3 (cont.)

Cluster Number	Feature Count	Features Contained	Orientation	Adults/ Subadults (A/S)
14 (cont.)	25	25	10° NE	A
		26	8° NE	S
		58	?	?
		59	29° NE	S
		60	25° NE	S
		61	23° NE	A
		62	23° NE	A
		63	23° NE	S
		147	?	?
		148	0° E	S
		149	17° NE	?
		150	?	?
		151	16° NE	A
15	6	86	28° NE	?
		87	26° NE	A
		140	24° NE	A
		141	33° NE	A
		142	27° NE	S
		143	29° NE	A
16	8	83	6° NE	A
		119	57° NE	S
		121	21° NE	S
		125	ca. 10° NE	2A, 1S
		130	11° NE	S
		131	6° NE	A
		132	2° NE	A
		133	5° NE	S

pocket), and described briefly below. It is possible that these clusters represent family groupings. However, without headstones and/or osteological analysis of the interments, this possibility cannot be tested and will remain only a tentative assumption.

Cluster 1: This cluster lies in the north central portion of the cemetery and contains four adults and four subadults. Six of the eight interments are hexagonal graveshafts and the angles of orientation range from 27 degrees to 43 degrees

northeast. The average distance between graves is about 18 inches. Feature 69 is intruded by Feature 62 of Cluster 14, a group of largely rectangular graveshafts. This intrusion suggests that all or part of Cluster 14 postdates Cluster 1.

Cluster 2: A cluster of two adults and three subadults in the southwestern portion of the cemetery, it is notable for Features 47 and 93, an adult and infant buried in a parallel overlapped fashion (Plate 13). The relationship of these two features is comparable to Features 97 and 98 in Cluster 4 just to the north, and the orientation and placement of the interments appear to be non-random. It is possible that these graves represent mothers and infants who died at about the same time and were buried together. Coffin nails were found at the top of the exposed section of Feature 93 (infant) suggesting that this grave is very shallow.

Cluster 3: This cluster contains Features 43 to 45 at the southern end of the cemetery, a cluster of three subadults whose graveshaft surface areas are very similar. Although the compass orientation of these three graves shows wide disparity, their proximity to each other and their collective separation from other graves warrants their assignment to this cluster.

Cluster 4: One adult (Feature 97) and two subadults (Features 96 and 98) comprise this small cluster. The relationship between Feature 97 and 98 was discussed above in Cluster 2.

Cluster 5: This group of nine grave features lies in the western side of the cemetery and crosscuts Cluster 6. Two adults and five subadults can be clearly defined. Feature 103

PLATE 13

Features 47 and 93



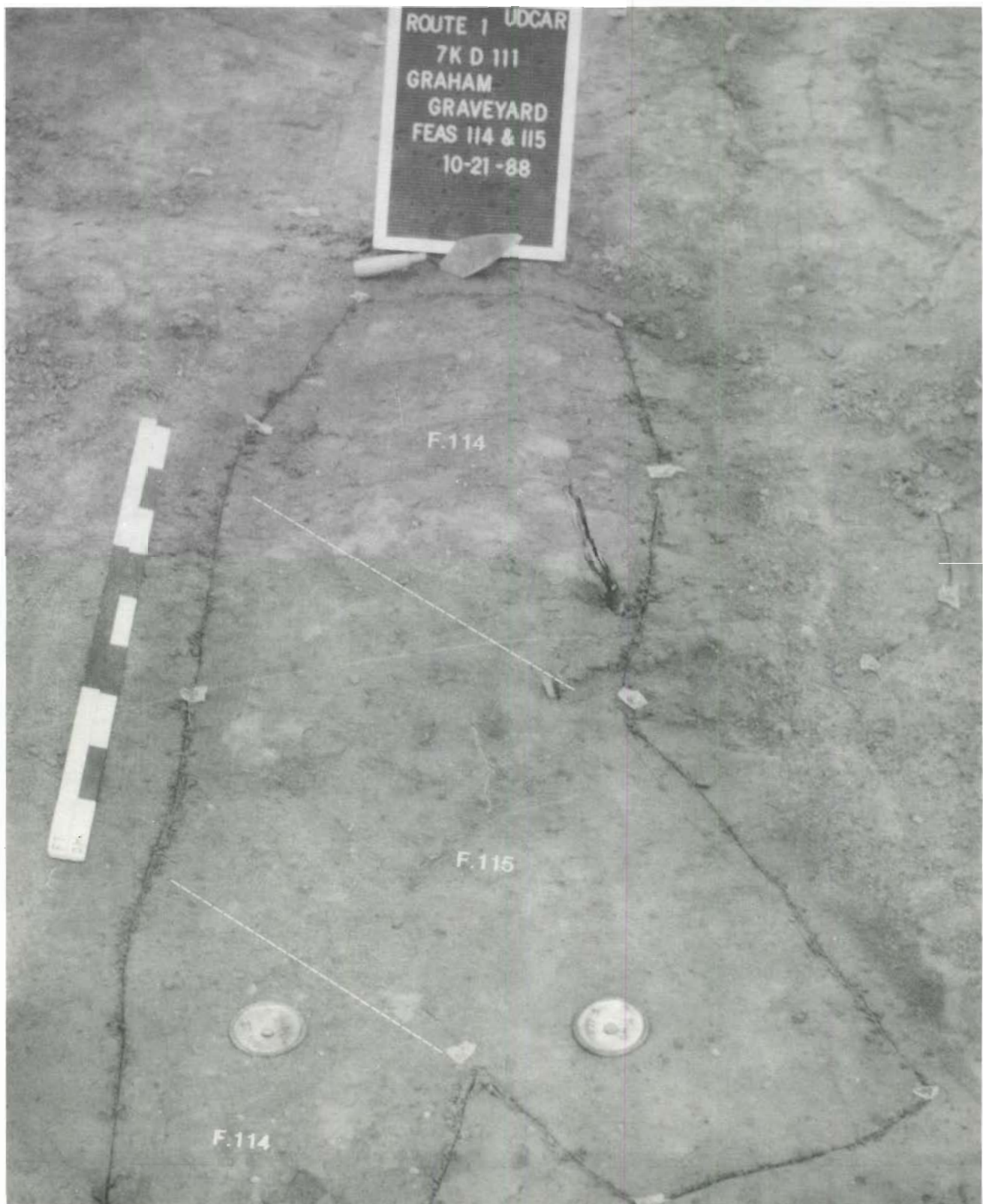
of this cluster contains at least three and possibly more interments divided into at least one adult and two subadults. Thus, Cluster 5 contains at least 11 graves even though only nine feature numbers were assigned. Feature 100, a child burial at the southern end of the cluster, contained the only head- and footstones associated with any burials. One standard red brick had been placed on its side at both the head and the foot of the 2.3' long grave. These bricks only became visible at the conclusion of the stripping operations, or not until six inches of topsoil had been removed. Both bricks were heavily weathered and contained no initials or other markings.

Cluster 6: Cross-cutting Cluster 5, this group of 16 grave features contains eight adults, seven subadults, and one unknown type, and fourteen of the 16 grave features are hexagonal. Except for Feature 118, all of the features in the cluster are contained within a 32 degree compass arc from 6 degrees southeast to 26 degrees northeast.

The temporal relationship between Clusters 5 and 6 may be indicated also by two examples of intrusive burial features. Features 108 and 115 of Cluster 5 intrude into Features 107 and 114, respectively, of Cluster 6 (Plate 14). This further supports the contention that Cluster 6 is earlier than Cluster 5. If the burial clusters do represent nuclear or extended family groupings, then it is unlikely that Clusters 5 and 6 were being used simultaneously for the simple reason that no two family group members would purposefully disturb the resting places of their neighbors' deceased kin. Some time interval, perhaps several decades, would be required to cause a memory

PLATE 14

Feature 115 of Cluster 5 Intruding into
Feature 114 of Cluster 6



lapse between the two families regarding grave site location. The Cluster 6 family may have died out completely (perhaps by epidemic) or the descendants may have left the area. The Cluster 6 graves were either poorly marked or completely unmarked by the time the Cluster 5 group began their interments, for there is no indication in the Cluster 5 orientation and alignment that they were aware of any of the Cluster 6 interments.

Cluster 7: This group consists of three adults and two subadults located in the center of the cemetery. This is the most northeasterly trending group of interments, with discernible angles of 45 degrees, 54 degrees, and 66 degrees northeast for three of the five graves. The bearing is the most definitive characteristic of this cluster. Features 66 and 68 overlap the head of Feature 67 and may be two small children buried with an adult in Feature 67.

Cluster 8: Located southeast of Cluster 7, Cluster 8 includes Features 54 through 57 and 64 and contains three adults and two subadults. All except Feature 57 are rectangular and all are oriented within a 17 degree range. Feature 55 abuts Feature 54 and the latter could be a child buried with a parent.

Cluster 9: This cluster is located south of Cluster 8 and also contains three adults and two subadults in mostly rectangular graveshafts. The bearings are very similar, suggesting that this group may be an extension of Cluster 8, notwithstanding the gap between Features 53 and 54. Feature 50 (adult) intrudes into Feature 51 (subadult) suggesting that the Feature 51 grave was a child of the Feature 50 occupant who died

long enough prior to the Feature 50 occupant for the family to have forgotten precisely where the child was buried. This circumstance would be entirely possible in a grassy plot with unmarked graves.

Cluster 10: Four graves (Features 40, 41, 48, and 153) lie in similar bearing in the southern end of the cemetery. Unlike most interments, which are side-by-side, these have a more linear end-to-end arrangement and are grouped more by bearing than by proximity. One adult and three subadults are contained in this group.

Cluster 11: This cluster contains just two interments, Features 37 and 38, which overlap and lie just east of Cluster 9. Because the average bearing in Cluster 9 was 1 degree southeast with little variation, and Features 37 and 38 are both 26 degrees northeast, these two were given a separate cluster number. Both are subadults, and Feature 37 clearly intrudes into Feature 38 suggesting an interval of at least several years between interments.

Cluster 12: This small cluster lies in a relatively unused section of the cemetery and contains two adult and two subadult graves. Features 36, 39, and 129 lie within a range from 11 degrees southeast to 1 degree northeast, but Feature 128, which is truncated by Feature 129, is oriented at 47 degrees northeast. This placement pattern suggests some time interval existed between the two interments or that the two may have been unrelated altogether.

Cluster 13: Features 1, 2, 15, and 16 are contained in this group and Features 1 and 2 were partially excavated, as previously described. Features 15 and 16 are two of the smallest graves in the cemetery (2.2' and 2.6' long, respectively) and are likely to be other children of the Feature 1 occupant. The angle iron which served to mark the corner boundary point at the onset of excavation of the cemetery was located above the lower legs of the Feature 1 occupant. If this angle iron is located in the same position as the survey point mentioned in the 1878 Hopkins Plot (Figure 4), then the Feature 1 occupant may be Robert Graham. However, Graham may be buried in Feature 10 (of Cluster 14). The rationale behind this takes into account the group of overlapping postholes labeled Features 4, 8, and 9, which lie between Features 1 and 10. These postholes are probably corner boundary posts which probably had a collective lifespan of many decades. This group of postholes lies only about 15" from the head of Feature 10. Feature 7, the cut granite blade measuring about one cubic foot, may be the stone referred to in the 1878 Hopkins plot of the property. However, it lies 7.6' away from the head of Feature 1 and does not appear to be associated with any other feature. Therefore, it's possible function at the site remains enigmatic.

Cluster 14: This is the largest single cluster in the cemetery, with at least 25 interments (Features 3, 10-14, 18, 20-26, 58-63, and 147-151). Features 23, 149, 150, and 151 were all truncated by Feature 144, an intrusive twentieth century trash pit. It is possible that other grave features were completely destroyed by the creation of Feature 144.

Feature 14 contains Feature 3, a subadult buried within and at a very different orientation than that of Feature 14. In addition, the Feature 14 outline suggests that at least three and possibly more overlapping graves are contained within it. Feature 14 probably represents one nuclear family. Later interments apparently disturbed earlier ones, for numerous small bone flecks and fragments were observed in the top of the exposed Feature 14 grave fill. Feature 58 contains at least two individuals in overlapping rectangular graves. Thus, the 25 grave features identified for this cluster contain at least 29 individuals.

Feature 25 is the only brick burial vault found in the cemetery and was surrounded by Feature 146, a builder's trench measuring at least 8.2' x 3.6' (Figure 9 [see pocket], Plate 10). Feature 146 was disturbed by Feature 144, the trash pit, and the west end of the vault roof contained two damaged bricks, indicating that Features 25 and 146 were probably disturbed by the machinery used to originally excavate Feature 144, the trash pit, in the early twentieth century. Feature 25 measured 6.9' x 2.2' and was very similar in construction to the vaults at the nineteenth century Nowell family cemetery found in Harrington, Delaware (Payne and Thomas 1988). The vault was constructed of standard size red brick and sand-lime mortar. Only the top of the vault was exposed and its depth was unknown. Regrettably, a few days after the conclusion of the excavations at 7K-D-111, vandals smashed a small hole into the vault and destroyed the contents.

Cluster 15: Four adults, one subadult, and one burial of unknown age are included in this group in the northwest portion of the cemetery. All burials are oriented between 24 degrees and 33 degrees northeast and all are hexagonal graveshafts except Feature 87.

Cluster 16: This cluster included eight features (83, 119, 121, 125, and 130-133) lying in the northwest corner of the cemetery. Except for Feature 119, all are oriented from 2 degrees northeast to 21 degrees northeast. The layout of the cluster takes the form of an arc presumably created by space pressure from Clusters 5, 6, and 15 and Features 79 and 134, the north and west side boundary ditches, respectively. Feature 125 contains at least three overlapping graves, probably of two adults and one subadult. Thus, 10 individuals are represented by the eight features in Cluster 16.

The clusters most likely represent families with the parents buried together and the children who failed to reach adulthood buried with them. Clusters 6 (16 graves) and 14 (25 graves, at least 29 interments) may represent extended families of several generations whose members chose to be buried together. The other clusters probably represent nuclear families, many of which are probably related by birth or marriage. Slaves, servants, and other members of an individual household may also be buried with the family or extended family unit, but that cannot be determined from the available data.

GRAVESHAFT OUTLINE

The burial shaft outlines at 7K-D-111 implied the type of coffin which may be contained within the shaft (hexagonal shaft outlines imply hexagonal coffins, for example). Since rectangular coffins did not become common until after about 1850, it was anticipated that the temporal development of the cemetery may be deduced by employing a seriation technique using graveshaft outlines. However, an investigation of the relationship between graveshaft outline and coffin shape at other sites demonstrated that the use of this technique would probably yield misleading results. Swauger (1958) has discussed an early nineteenth century burial method at the Ravenscraft Site in western Pennsylvania where a hexagonal coffin was placed in a rectangular shaft. Carson et al. (1981) found rectangular graveshafts dating from the period 1695-1735 at Middle Plantation, Anne Arundel County, Maryland. Burnston noted rectangular graveshafts at Catoctin Furnace, Maryland for the period 1790-1820 (Burnston 1981). Shogren et al. 1989 noted both hexagonal and rectangular coffins in an Alabama cemetery containing solely rectangular graveshafts which dated from the mid-nineteenth century to about 1920. Payne and Thomas (1988) noted hexagonal coffins in rectangular graveshafts and vice versa from the Nowell family cemetery, Harrington, Delaware which dated to the nineteenth century. Thus, while rectangular coffins may not become widely used until after 1850 (Blakely and Beck 1982), rectangular graveshafts are present well before that date. Perhaps the most useful thing that can come from the analysis of the shape of the graveshaft is the degree of

TABLE 4

**PERCENTAGES OF HEXAGONAL AND RECTANGULAR GRAVESHAFTS
IN EACH BURIAL CLUSTER AT LAFFERTY LANE CEMETERY**

Cluster	Burials	Hexagonal (%)	Rectangular (%)
1	8	6 (75)	2 (25)
2	5	3 (60)	2 (40)
3	3	3 (100)	0 (0)
4	3	3 (100)	0 (0)
5	7	4 (57)	3 (43)
6	13	11 (85)	2 (15)
7	5	5 (100)	0 (0)
8	5	1 (20)	4 (80)
9	5	1 (20)	4 (80)
10	4	4 (100)	0 (0)
11	2	0 (0)	2 (100)
12	4	3 (75)	1 (25)
13	4	4 (100)	0 (0)
14	21	4 (19)	17 (81)
15	6	5 (83)	1 (17)
16	10	6 (60)	4 (40)
Total	105	63 (60)	42 (40)

internal shape similarity that characterizes each cluster (Table 4). Thirteen of the 16 clusters exhibit a dominance of one form or another by 75 percent or more. Internal similarity may suggest a degree of contemporaneity, but not the relative temporal sequence between clusters.

The burial cluster analysis demonstrated several things about burial placement. Compass bearing is only an approximate measure of the placement of the coffin and probably a subordinate one at that. After the initial one or two interments within a group, a desire to bury the dead parallel to the previous graves seems more important than an orientation toward the spot on the horizon where the sun comes up at the time of interment.

TABLE 5

POSTHOLE/POSTMOLD CLASSIFICATION AT LAFFERTY LANE CEMETERY

GROUP 1) THOSE PROBABLY ASSOCIATED WITH GRAVES OR GRAVE CLUSTERS

PH/PM	Location	Comments
6	West of F. 2	Adjacent to Cl. 13, probable plot marker
42	East of F. 43	Just east of Cl. 3, probable plot marker
70	Head of F. 62	Probable family plot marker within larger Cl. 14
78	Central west edge of Cl. 1	Family plot marker from Cl. 1
92	Between Cl. 2 and 3	Possible plot marker for either Cl. 2 or 3
102	Head of F. 41	Plot marker for Cl. 10
120	Adjacent to F. 121	Plot marker for part of Cl. 16
152	Overlaps head of F. 149	Plot marker for section of Cl. 14
154	Adjacent to F. 141	Plot marker for Cl. 15

GROUP 2) THOSE POSSIBLY ASSOCIATED WITH GRAVES OR GRAVE CLUSTERS

PH/PM	Location	Comments
4	Adjacent to F. 1	Corner boundary/fence post
5	Several feet north of F. 1	Unknown function
8	Adjacent to F. 1	Corner boundary/fence post
9	Adjacent to F. 1	Corner boundary/fence post
29	3.0' east of F. 128	Possible plot marker, Cl. 12
32	8.0' east of F. 48	Unknown
33	4.0' northeast of F. 48	Possible plot marker, Cl. 10
34	3.3' north of F. 48	Possible plot marker, Cl. 10
35	3.0' south of F. 38	Possible plot marker, Cl. 11
80	Just inside F. 79 boundary ditch	Unknown
81	Just inside F. 79 boundary ditch	Unknown
82	6.6' northeast of F. 83	Unknown
84	4.3' north of F. 87	Unknown
85	Adjacent to F. 87	Possible plot marker, Cl. 15
91	1.6' southwest of F. 27	Grave marker for F. 27
145	5.0' southeast of F. 37	Unknown

KEY:

PH = Posthole
 PM = Postmold
 F. = Feature
 Cl. = Cluster

TABLE 5 (Continued)

GROUP 3) THOSE OUTSIDE THE CEMETERY

PH/PM	Location	Comments
135	Several feet north of F. 79, boundary ditch	Fencepost along former farmlane
136	Several feet north of F. 79, boundary ditch	Fencepost along former farmlane
137	Several feet north of F. 79, boundary ditch	Fencepost along former farmlane
138	Several feet north of F. 79, boundary ditch	Fencepost along former farmlane

POSTHOLES AND POSTMOLDS

A total of 29 postholes and postmolds were recorded from 7K-D-111 (Table 5) and can be classified into three groups: 1) those from inside the cemetery and probably associated with graves or grave clusters, 2) those from inside the cemetery and possibly associated with graves or grave clusters, and 3) those outside the cemetery. Category 1 includes nine postholes and postmolds which appear singly and adjacent to graves or grave clusters. One posthole each is associated with Clusters 1 (Feature 78), 2 (Feature 92), 3 (Feature 42), 10 (Feature 102), 13 (Feature 6), 14 (Features 70 and 152), 15 (Feature 154), and 16 (Feature 120). Two were identified with Cluster 14 and are perhaps family plot markers within the larger cluster.

Category 2 includes 16 postholes with less apparent associations with the graves. Features 4, 8, and 9 are probable corner boundary posts marking the present and historic land division near Feature 1. Features 32-35 (Plate 15) and 145 are bounded by Clusters 9, 10, 11, and 12 and may be grave markers for families using this corner of the 1/4 acre plot for burial. However, the distance from some of the postholes to the graves

PLATE 15

Feature 35, Rectangular Posthole

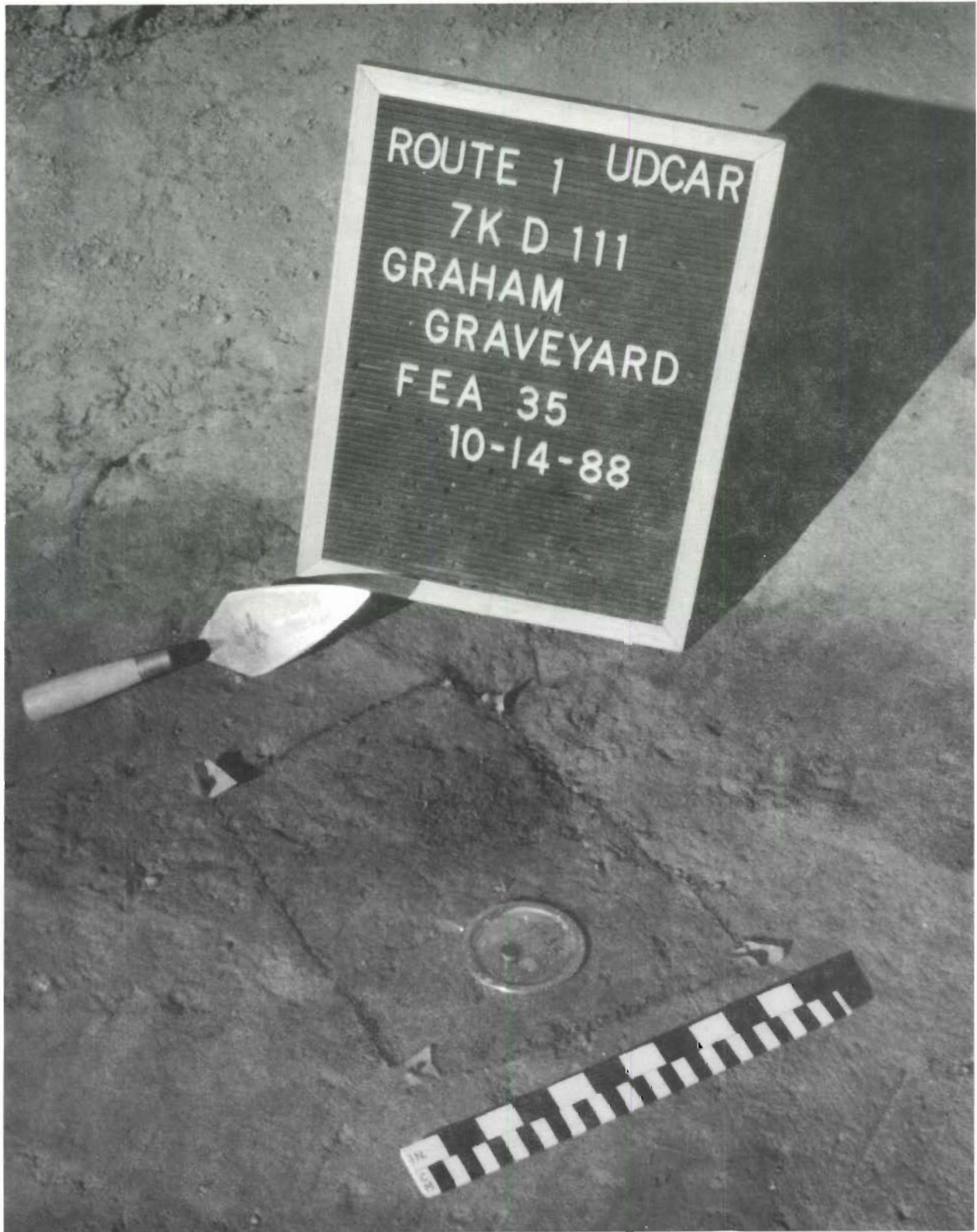
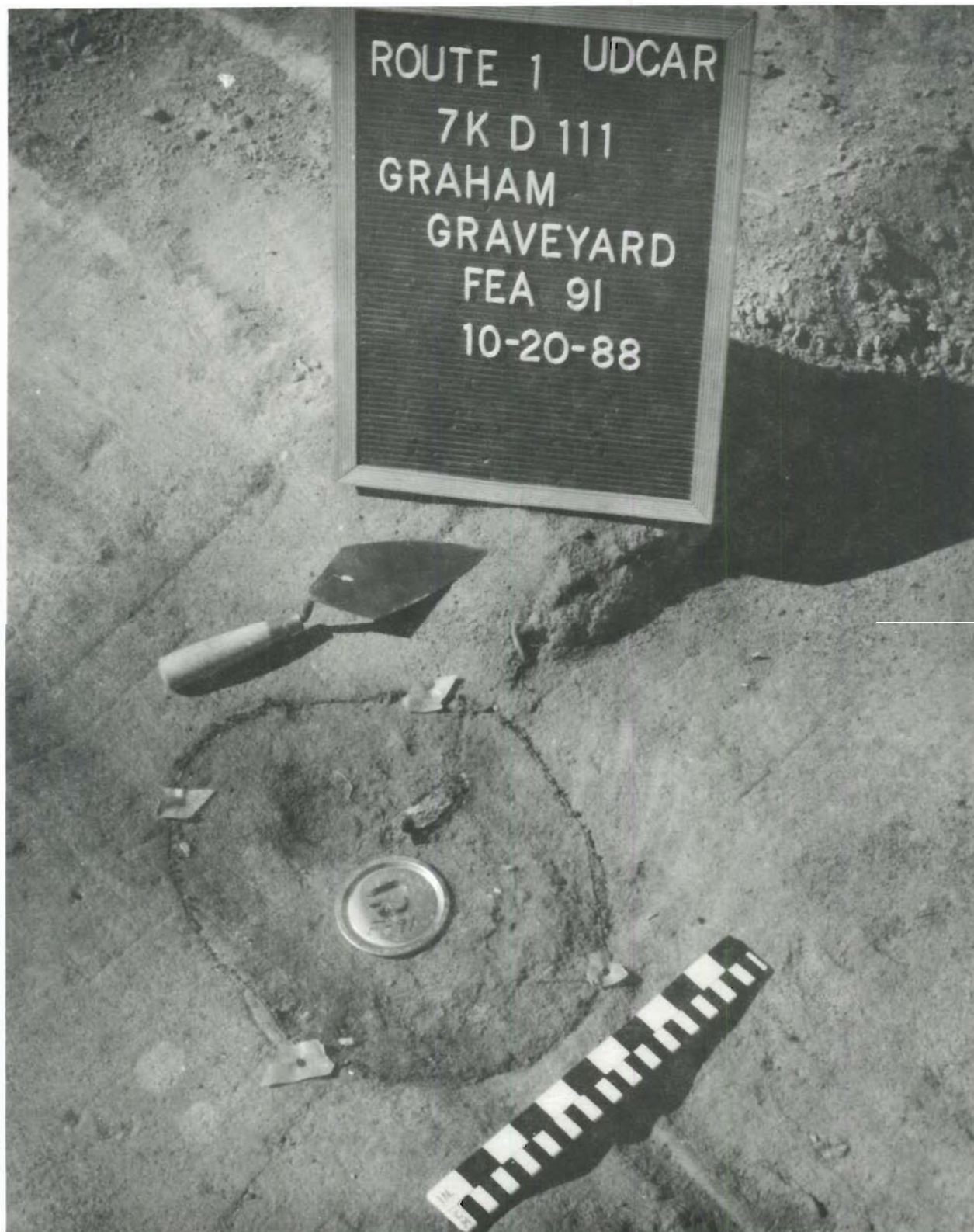


PLATE 16

Feature 91, Circular Posthole



makes for a doubtful association. Feature 29 may be a marker for Cluster 12 and Feature 91 (Plate 16) may be a marker for grave Feature 27 (southeast corner of cemetery). Features 80-82, 84, and 85 form a 10.9'-long fishhook-shaped group above Cluster 15. Its purpose is unknown, but its overall shape and the number of features is similar to Features 32-35 and 145 located in the southern end of the cemetery. Features 135 to 138 lie several feet to the north of Feature 79, the northern boundary ditch, and probably form part of an old fence line adjacent to a farm lane shown on the 1948 aerial (Plate 1).

BOUNDARY DITCHES

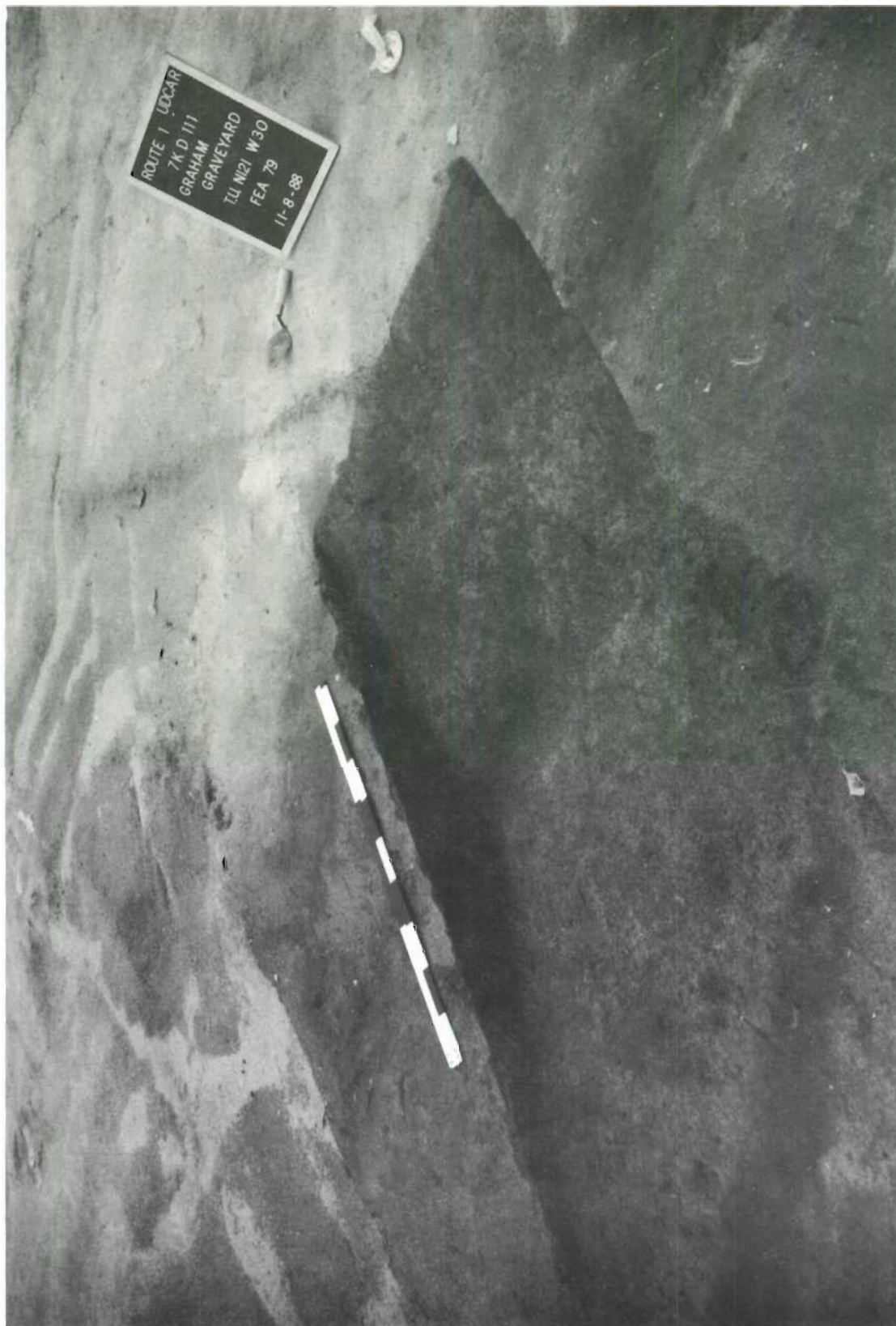
During stripping operations, several linear organic stains appeared in the subsoil around the edges of the cemetery. Sections of these stains were apparently removed by earlier plowing around the cemetery and by the mechanical stripping conducted for this investigation. These stains were labeled Feature 79 (north boundary, two sections totaling 60'), Feature 134 (west boundary, one section measuring 43'), Feature 28 (east boundary, two sections totaling 46'), and Feature 31 (south boundary, one section measuring 31'). Presumably, the ditch completely surrounded the cemetery and provided drainage, and served as a boundary from the adjacent agricultural field. They may have served in a fashion similar to "ha-ha" ditches in Virginia. Sufficient lengths of the boundary features remained to determine that they formed a rectangle measuring 96' x 100' (.220 acres) or fairly close to 1/4 acre.

One quarter acre may have been a fairly common size for a rural family cemetery. The eighteenth century Rodney family cemetery at Byfield east of Dover measured 90' x 95' (Faye Stocum, personal communication 1988), and when Thomas Denny of Smyrna sold 100 acres to William Denny in 1805, the deed contained the exclusion "...excepting 1/4 of one acre thereof which the said Thomas Denny reserves out of the same together with the free privilege of ingress and egress thereto as a burying ground" (KCD I-2-79).

A sample test excavation was conducted at each of the four boundary ditches. The test units were each 3.0' wide and extended across the ditch, a distance of 5 to 6 feet. Test unit N121W30 was placed in Feature 79, the north boundary ditch, and measured 3.0' by 5.0' by 0.60' deep (Figure 10, Plate 17). The fill contained numerous oyster shell fragments, nail fragments, pipe bowl and stem fragments, redware, brick, and glass. See Figure 10 for a profile of the boundary ditch in this unit. Test unit N101W64 was located in the northern section of Feature 134 and measured 3.0' x 6.0'. It contained only one red brick fragment and two sherds of redware. Test Unit N40E34 was placed in Feature 31, the southern boundary ditch, and Unit N67E47 in Feature 28, the eastern ditch. The former contained just one piece of burnt window glass and the latter a small brick fragment. The profiles of all four boundary ditch excavations were similar. No postmolds or postholes were found anywhere in the boundary ditches, so it is unknown if a fence was placed within it. It is also unknown if the ditches are contemporaneous with any or all of the graves contained within

PLATE 17

Feature 79, North Boundary Ditch Section Excavated



it. However, it is likely that the ditches were dug sometime during the use of the cemetery, a contention which is supported by the redware fragments found during the test excavations in the ditches.

INTERSITE ANALYSES

COMPARISONS WITH OTHER LOCAL FAMILY CEMETERIES

The Lafferty Lane cemetery can be compared to other family cemeteries recently excavated in the Dover area. The Loockerman's Range Site (7K-C-365B), near the Dover Downs racetrack is a multicomponent site which contained prehistoric Woodland I and Woodland II components as well as an early to mid-eighteenth century domestic component (Bachman n.d.). Also located on the small rise which contained the site were four unmarked historic graves of an unknown date. The four graves lay in a row spanning about 11.0' and consisted of two adults (Features 2 and 8) whose graveshafts measured 6.3' and 6.7' long, respectively, and two subadults (Features 3 and 9), measuring 4.8' and 4.5'. The burial orientations of these four graves are similar to those at Lafferty Lane. With due east arbitrarily designated zero degrees, the Loockerman's Range graves measure 1, 2, 3, and 15 degrees south of east. No gravestones, postmolds, or other markers were associated with any of the four features. All four graveshaft outlines were oval to slightly hexagonal and all four contained hexagonal coffins. Coffin nails and coffin wood stains were encountered in all four graves but sparse skeletal remains were found. No human remains of any sort were found in Features 2 and 3, while

8 and 9 contained only tooth fragments. The few teeth found in Feature 9, which totaled 10 molars and canines, were identified as those of a 6 to 7 year old, which is consistent with the size of the feature (graveshaft length of 4.5', coffin stain length of 4.3'). No grave furniture, clothing fragments, personal adornments or other artifacts were found in any of the four graves.

The grave fill contained eighteenth century ceramics and numerous small brick fragments suggesting that the four interments took place during or after the domestic occupation of the site, but probably before the third quarter of the nineteenth century when rectangular coffins became common. It is also unknown if the occupants of the site are in any way related to those in the graves.

The Rodney family cemetery at Byfield near Dover was partially excavated by the Bureau of Archaeology and Historic Preservation several years ago. The boundary ditch surrounding the graveyard measured 90 x 95 feet, or similar to the 96 x 100 feet found at Lafferty Lane. This dimension, approximately equal to 1/4 acre, may have been a standard set aside for a family graveyard in the eighteenth and early nineteenth centuries. At Byfield, partial stripping of the surface revealed 14 graves, including one brick vault, none of which were marked. The total number of interments in the cemetery is not known. All of the exposed graveshafts were oriented east-west and 11 adults and three subadults were indicated by the graveshaft dimensions. Twelve of the fourteen shaft stains appear rectangular and two hexagonal. The interments date to

the eighteenth and early nineteenth centuries, but the identification of the occupants of each grave can only be assumed to be members of the Rodney households.

The Nowell Family Cemetery (7K-E-174) near Harrington, Delaware was excavated in 1988 and involved the removal of 44 human graves and three animal interments which dated to the nineteenth century (Payne and Thomas 1988). Five brick vaults were among the 44 human graves and, interestingly, all five vaults appeared to contain females. The burial area covered approximately 5800 square feet and was organized into two sections, labeled north and south by the excavators. Possible nuclear family clusters may be perceived in the plan, but since only one headstone remained in the cemetery at the onset of excavations in the spring of 1988, little of the internal family grave orientation could be determined. The orientation of the graves was the usual feet-to-the-east with a high degree of parallelism and an average bearing of 23 degrees south of east (113 degrees southeast of north) with very little deviation.

Since the goal of the excavations at the Nowell cemetery was prompt grave removal and reburial, the excavators could perform only cursory osteological analysis before reinterment. They were able to provide the sex, age estimates, and other observations for some or all of the 35 burials. Tentative or positive gender assignment produced nine identifiable females, and nine males, while 15 could be classified as subadults (under 18 years of age) and 16 as adults (18 years of age and older). The subadult/adult ratio of 15/16 (48% subadults, 52% adults) is

somewhat lower than at Lafferty Lane, where 58 percent of the graveshafts were classified as subadults.

The coffin type was classified as square [rectangular?], shouldered, or oval and could be determined for 27 of the interments at the Nowell Cemetery. There seems to be little correlation between the coffin type and graveshaft outline, further supporting the contention made earlier in this report that grave shaft outline cannot be used as a basis for relative dating at Lafferty Lane.

GEOGRAPHICAL CONSIDERATIONS OF FAMILY CEMETERY PLACEMENT

An extension of the geographical analysis of the cemetery is its relationship to the farm complex used by the family during the period the cemetery was formed. The Lafferty Lane cemetery was not associated with any known late eighteenth and early nineteenth century dwelling sites, although the "F. Register" house shown on Byles' Atlas of Kent County (1859) may have been the residence of Thomas Brown who owned the property prior to 1822. It is known that the farmland surrounding the cemetery was occupied during the period the cemetery was in use. Given that the Dover to Kitts Hummock Road (present U.S. 113) was an established roadway by the early eighteenth century, and that Lafferty Lane was not laid out until the early nineteenth century, it is likely that the Browns and other potential occupants of the Lafferty Lane cemetery lived somewhere along the Dover to Kitts Hummock Road. The present distance from U.S. 113 to the cemetery is 1200 feet, but since the location of the eighteenth and early nineteenth century residences is unknown,

TABLE 6

**COMPARISON WITH OTHER KENT COUNTY FAMILY CEMETERIES
WHICH ARE ROUGHLY CONTEMPORARY WITH LAFFERTY LANE
(FROM DILL 1989)**

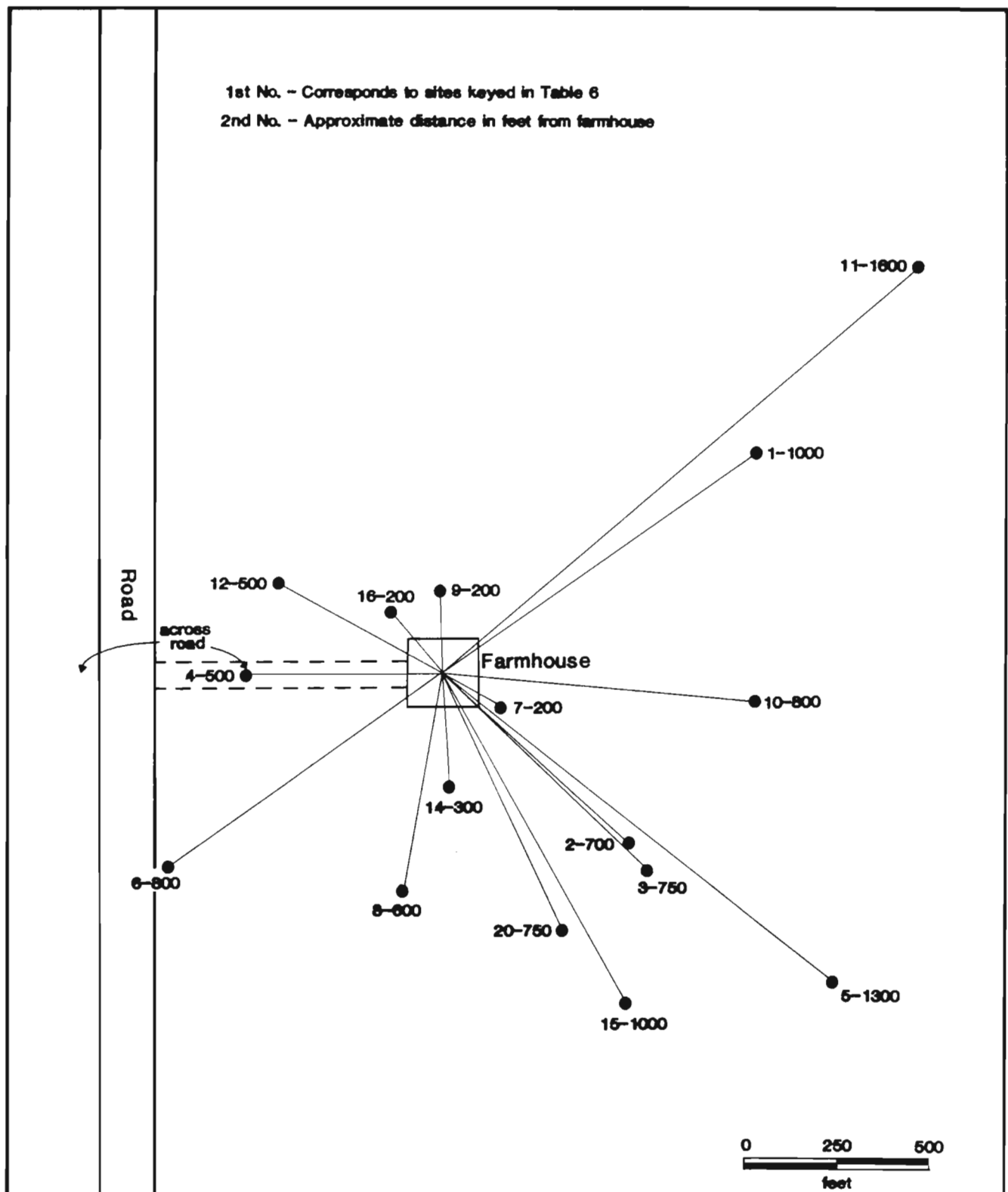
Cemetery	Individuals	Date Range of Interments	Distance from Farmhouse (feet)
1. Lafferty Lane	123	estimated 1760-1840	1000
2. Lockwood Family	7	1805-1832	700
3. Short Farm	7	1809-1885	750
4. Fox Hall Plantation	3	1750-1793	500
5. Slaughter Family	16	1830-1882	1300
6. Clements Farm	8	1829-1865	800
7. Smock Family	9	1801-1849	200
8. Anderson Family	16	1815-1882	600
9. Barker Family	4	1790-1797	200
10. Pickering Family	3	1813-1871	800
11. Warren Family	7	1804-1835	1600
12. Reed Family	6	1807-1850	500
13. Whitely Family	11	1797-1859	1000
14. Jester Family	3	1803-1807	300
15. Ward Family	13	1798-1873	1000
16. Beswick Family	27	1771-1881	200
17. Parson Thorne Cemetery	17	1795-1858	100
18. Wood Family	2	1818-1831	200
19. Stratham Farm Memorial	10	1760-1883	250
20. Saulsbury Family Plot	23	1656-1922	750
21. Layton Cemetery	1	1809	1500

Range: 100' - 1600'
Average Distance: 678.5'

this measurement is of limited utility.

However, the relationship of family cemetery plots to extant dwellings or former dwellings which are known from mid-nineteenth century atlases (Byles' Atlas of Kent County 1859, Beers' Atlas of Delaware 1868) can be used for comparison. Table 6 lists the cemeteries, the date range of the interments, and the distance from the dwelling for a number of Kent County

FIGURE 13
Composite of Dwelling-to-Family Graveyard Distance,
Kent County Sample



farms. The relationship of these family cemeteries to the farmhouse on the property was then plotted and is shown in Figure 13. From this sample of 16 plots, it can be seen that the majority lie within the semicircle to the "rear" of the dwelling. The range is from 100 to 1300 feet and the average is 679 feet.

A group of Sussex County family cemeteries was studied for comparison. The Sussex East-West Corridor Study (Catts and Custer 1990) identified 34 family cemeteries from primarily the nineteenth century. From Dill (1989) and the BAHF files, cemetery locational data was compared with Byles' (1859) and Beers' (1868) Atlases. A plot was generated (Figure 14) which corroborated the Kent County result. A distance comparison (Table 7) produced an average house-to-cemetery distance of 832 feet for all 34 family graveyards, or slightly but not significantly higher than the Kent County sample.

The bearing and distance plots of both the Kent and Sussex samples indicated several things about the placement of family cemeteries on the Low Coastal Plain of southern Kent and central Sussex counties. The farmhouse is usually located between the cemetery and the public road leading past the house. This is interpreted as a means of keeping the family dead out of the public way and in a personal, more controllable space to the "rear" of the farmhouse. The possession of the family cemetery was desirable within the context of an agriculturally based economy with a world view derived from continuity upon and allegiance to the land, the nurturing of a family-owned farmstead, and an individual self-worth derived from land

FIGURE 14

Composite of Dwelling-to-Family Graveyard Distance,
Proposed Sussex East-West Corridor Study Sample

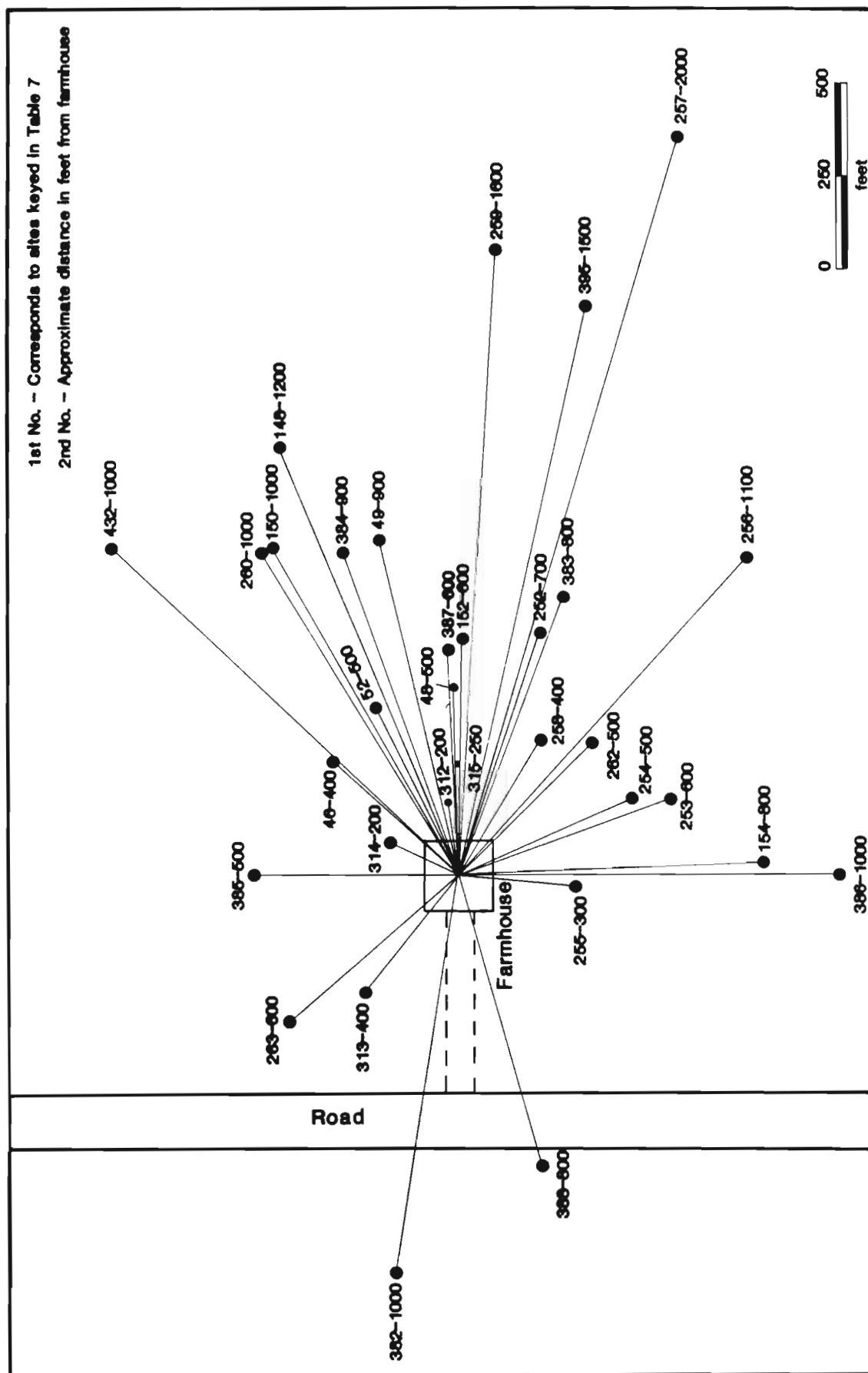


TABLE 7

SUSSEX COUNTY EAST-WEST CORRIDOR STUDY SAMPLE CEMETERIES

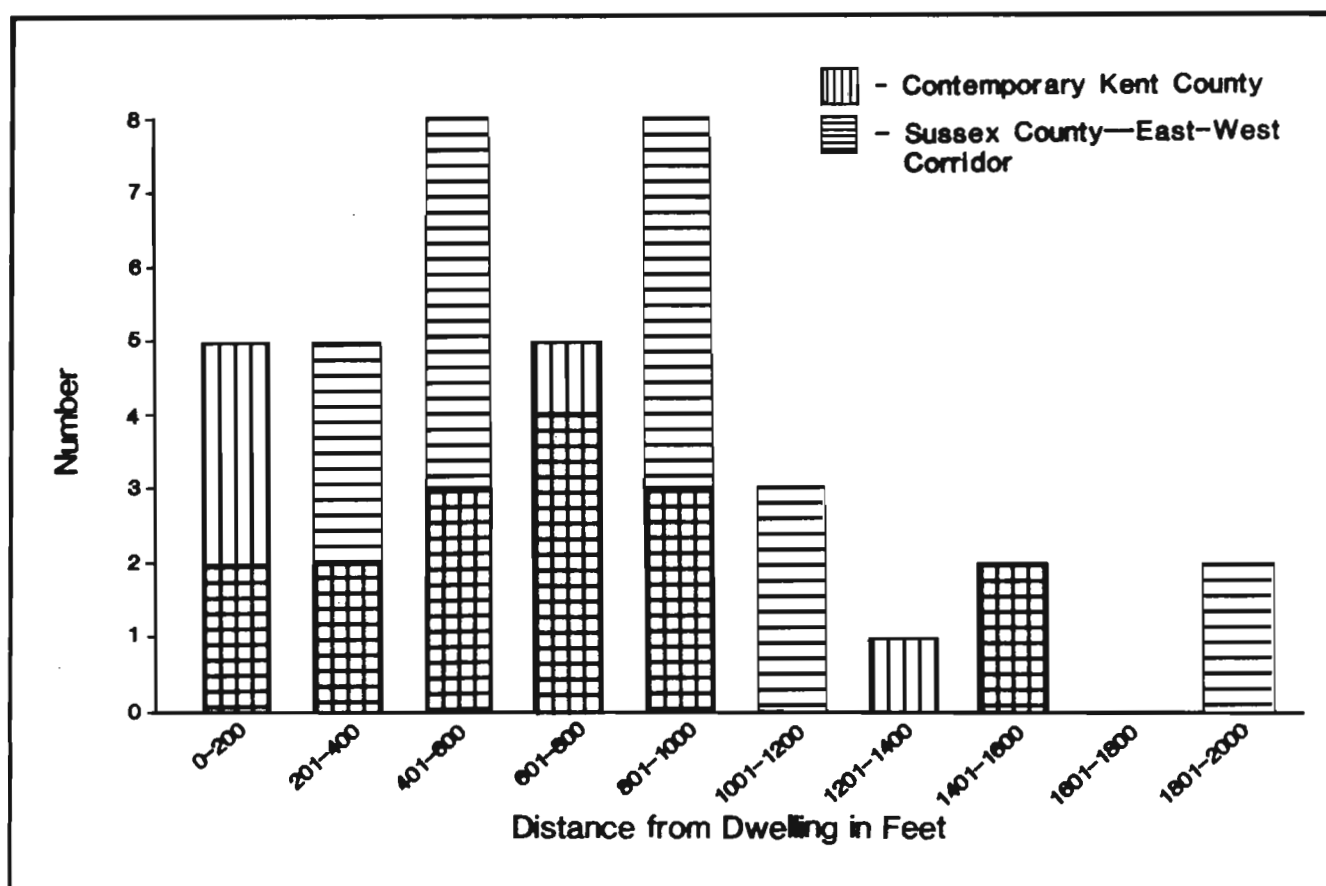
Cemetery (Interments)	Date Range of Interments	Distance from Farmhouse (feet)
46-Family Cemetery	?	400
47-McIlvaine Grave	?	2000
48-Rodney Cemetery	?	1000
49-Family Cemetery	?	900
52-Family Cemetery	?	500
147-Russell/Prettyman	?	500
148-Isaac Cemetery (1 grave)	1898	1200
150-McColley Cemetery (6 graves)	1881	1000
152-Family Cemetery	?	600
154-Tyndall/Knowles (5 graves)	1853-1923	800
252-Mills Cemetery (2 graves)	1861-	700
253-Family Cemetery	?	600
254-McIlvain Cemetery (3 graves)	1826-1836	500
255-Family Cemetery	?	300
256-Family Cemetery	?	1100
257-Family Cemetery	?	2000
258-Family Cemetery	?	400
259-Family Cemetery	?	1600
260-Fred Walls Cemetery (1 grave)	?	1000
262-Vent Farm Cemetery (3 graves)	1826-1906	500
263-Barrett Family Cemetery (6 graves)	1860-1872	600
312-Family Cemetery	?	200
313-Family Cemetery	?	400
314-Family Cemetery	?	200
315-Family Cemetery	?	250
382-Family Cemetery	19th Century	1000
383-J. & J. Collins Cemetery (4 graves)	1850-1900	800
384-Family Cemetery	1868	900
385-Family Cemetery	?	1100
386-Family Cemetery	?	1000
387-Collins Cemetery	1881-1917	600
388-Short Cemetery	19th Century	800
395-Family Cemetery	?	1500
432-Family Cemetery	?	1000

Range: 150' - 2000'
Average

Distance: 832'

FIGURE 15

Number of Cemeteries per Distance Increment

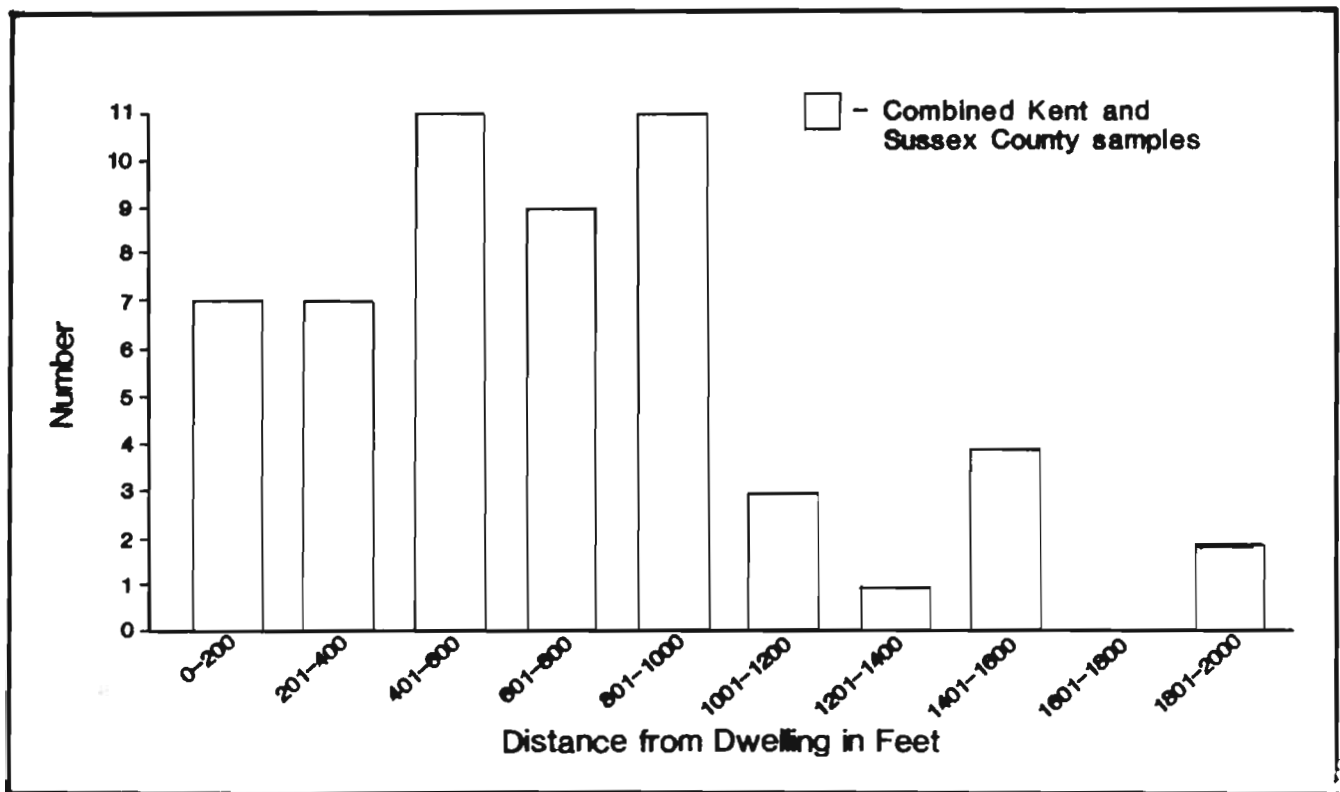


ownership and farm productivity.

The distances from the farmhouse to the cemetery are plotted in Figure 15. The dwelling to cemetery distance was measured in 200 foot increments from 0 to 2000 feet and the number of family cemeteries within each distance increment is shown. Figure 15 includes a comparison of the Kent and Sussex county samples; Figure 16 shows a composite of both samples. Although there are some minor inconsistencies between the two samples, there seems to be a peak between 400 and 1000 feet and a secondary peak at 1400-1600 feet. The Kent County data also show a fairly high number for the 0-200' distance.

FIGURE 16

Composite of Dwelling-to-Family Graveyard Distance, Combined Kent County and Sussex County Sample



Geographers have indicated that topography is an important consideration in cemetery placement for each farm (Francaviglia 1971; Jeane 1969; Price 1966), and the Kent County and Sussex County data support this conclusion. The dwelling is generally placed on a low ridge or rise affording good drainage. The distance of house to cemetery probably reflects the selection of a second piece of well drained high ground which falls within that 400-1000 foot distance from the farmhouse and which is also located in the rearward 180 degree semicircle away from the public road or thoroughfare. The family dead are shown respect through interment in a clearly demarcated burial plot located on a piece of well-drained ground within the family farmstead.

However, the placement of the cemetery several hundred feet from the dwelling also shows a desire of the living to be separated from the dead, and there could be several reasons for this. One reason could be for concerns of health. The graveyard would not be placed near a source of drinking water for fear of contamination. A second reason may have been to separate the sacred burial ground from the profane daily activities of the dwelling house and the nearby farmyard. The distance would reduce the probability that a pig or some other barnyard animal might disturb the graves. Finally, the detached nature of the family cemetery may have allowed for the private indulgence of ancestor veneration or worship.

Graveyards remaining on the landscape today which are no longer associated with a structure can be used in turn as locators or predictors for dwelling houses. The settlement and locational information outlined in the previous pages could be applied to a specific farmstead, perhaps one which had been allowed to return to mature forest, and used as an indicator for a house location. Topographic considerations and a knowledge of the early road system coupled with a known cemetery location may offer a more efficient method for survey.

CONCLUSIONS

Excavation at the Lafferty Lane Cemetery (7K-D-111) revealed the existence of a private family cemetery probably dating from the mid-eighteenth to the mid-nineteenth centuries. Thought to contain several generations of the Benjamin Brown, Sr. family. The cemetery measured 96 by 100 feet or

approximately 1/4 acre and contained 116 burial features representing at least 123 individual interments. One arched brick vault was included in the total. No headstones were encountered and archival research indicated one associated family name, Brown, and one named interment, Robert Graham, in the graveyard. Two of the burials were partially excavated and verified that the exposed graveshafts did in fact contain skeletal remains. Since no headstones or skeletal remains were available for study at this site, the analysis focused upon the description and the internal configuration of the graveshafts, genealogical data, and land ownership records as a basis for reconstructing the chronology of owners and occupants of the landscape during the time the cemetery was used and for making geographic comparisons with other cemeteries in Kent and Sussex counties.

The lack of gravestones at the Lafferty Lane Site is puzzling but not unusual. Historically, headstones were not often used by certain religious groups, specifically Quakers and to a lesser extent Presbyterians, because of their beliefs regarding idolatry. Contemporary examples of this practice are provided by Benjamin Mifflin in his quote at the beginning of this report, and by the Frenchman Brissot de Warville in 1788, when he described the funeral of a Philadelphia Quaker: "I saw near some of the graves, some pieces of black stones, on which the names only of the dead were engraved. The greatest part of the Quakers dislike even this; they say, that a man ought to live in the memory of his friends, not by vain inscriptions, but by good actions" (De Warville 1970:194). Based on some

genealogical research by Heite (1988), it is possible that at least some members of the Brown and Graham families were Quakers, and later members of the family are known to have been Presbyterians. Therefore, the absence of headstones at Lafferty Lane may be attributable in part to the religious preferences of the families.

However, it is known that some stones were present in the cemetery at one time; this contention is supported by the mention of Robert Graham's gravestone in the deeds, and by a recollection of a local hunter, Mr. Harold Short. It is entirely possible that the stones were removed on purpose for other uses, such as corner markers, door steps, or support piers. Bonine (1956) indicates that such "adaptive reuse" of gravestones took place at a graveyard in Lewes, Delaware, where four previously marked graves were discovered, but that fieldstones marking the graves "had been collected to make borders for flower beds by an old colored woman who had lived on a corner of the plot." A similar situation may have occurred at the Lafferty Lane Cemetery, particularly since the families whose ancestors were interred there were no longer tied to that parcel of land and the graveyard location was no longer a part of the collective memory of the descendants.

It should be noted in passing that the number or presence of gravestones is not necessarily a reliable indicator of the number or presence of interments at a site. For example, the Nowell family cemetery was represented by one extant headstone, but Payne and Thomas (1988) uncovered 44 interments at the site.

Thus, the number of gravestones present on the Delaware landscape of today may be drastically under-representative of the number of actual interments in rural areas.

The title searches of the properties in the vicinity of the cemetery gave little indication as to the presence or ownership of the burying ground. Consideration was given to three cemetery types. It is large enough (approximately 120 graves) to have been a church cemetery. Scharf (1888:1052) reported that the first location of Christ Church (established in 1704) was on glebe land located south of Dover, on the east side of St. Jones Creek, close to the vicinity of the Lafferty Lane Cemetery. Extensive historic research into the Anglican Church in Kent County, however, revealed that the earliest Christ Church was located on the tract called "Porter's Lodge", north of "Aberdeen" (Silliman 1982; Rightmeyer 1947). Scharf (1888:1058) also intimated that an early St. Jones Presbyterian Church may have been located somewhere on St. Jones Creek "where in early days there was a somewhat thickly inhabited section of country, and it [the church] ceased to exist entirely about the close of the last century [circa 1800]." Once again, however, extensive investigation into published and unpublished Presbyterian Church records failed to identify the presence of a St. Jones Church (Lappen 1972; Stonecipher 1887; Presbytery Minutes 1789-1820; Turner 1902; and Lewes Presbytery Minutes 1758-1820). Additionally, none of the dozens of deeds examined back to the 1680s ever mentioned a church, churchyard, or church burying ground either contained within their limits or as bordering properties. Since churches have been prominent

landmarks on the American landscape throughout history, it is likely that it would have been mentioned at least once in the deeds or shown on a historic map, if it was present.

The second function considered for the cemetery was as a potter's field. However, the Dover potter's field for this time period lies west of the city and its location is known (Alice Guerrant, personal communication 1988). Once again, there is no mention of land being sold for a potter's field in any of the deeds examined.

Therefore, it was concluded that 7K-D-111 was a private cemetery, albeit a very large one. Most of the private family cemeteries in the area are considerably smaller, so this one must include several families and extended families who lived in the area for several generations. Most likely, the families were linked by direct descent and affinal ties and lived on farms which were split off from the original "Aberdeen" grant or situated adjacent to it.

The burial places of most of the 76 people listed in Figure 8 are unknown. Two exceptions are Jackson Lafferty (I) and (II) who died in 1865 and 1868, respectively, and are buried in a churchyard in Dover. It is also unknown if there could have been another family or families who made use of the cemetery prior to Benjamin Brown, Sr. But, based on the remaining 76 names shown in the partial genealogy of Figure 8, it is conceivable that 123 people could be buried there if we include several extended families over approximately 80 years of use.

The later owners of this farm (Register 1833, Dyer 1865, the Maloney Brothers 1919, etc.) are known to be buried elsewhere, so even if a few earlier Brown family members were returned to this cemetery for burial after the farm had passed out of the family, interments would be increasingly uncommon after the mid-nineteenth century. Families who moved to other hundreds, counties, or states would have most likely established their own family graveyards.

The graveshafts were organized into 16 clusters which exhibited high degrees of internal grave proximity and similar orientation. Nearly all of the features were oriented east-west and the overall average degree bearing was 73.4 degrees east of north. The high degree of parallelism and proximity apparent within each cluster suggested that these factors were more important for grave placement than bearing. The clusters included graveshafts numbering from two to 25 burial features which are interpreted as representing various nuclear and extended families related by birth and marriage. Some clusters contained postmolds located at the western edge of the cluster or at the heads of the graves which are possible grave or plot markers.

A partial Benjamin Brown, Sr. family genealogy was constructed and correlated with local land records, tax assessments, and other public documents to recreate the eighteenth and early nineteenth century settlement pattern and thus provide a range of possible names for the interments at 7K-D-111. The land records indicated that Benjamin Brown's sons and sons-in-law tended to stay on Benjamin Sr.'s land well after

his death in 1767, occupying farmsteads gained through inheritance and marriage. Only two of the 94 individuals shown in the Brown genealogical chart (Figure 8, which also includes household head counts from census data where actual names of individuals were not obtainable), have known burial locations. Therefore, it was concluded that the Lafferty Lane cemetery was the final resting place for Benjamin Brown, Sr. and his descendants from the time of his death in 1767 (and possibly earlier) until the time the farm passed out of the Brown family's ownership in the second quarter of the nineteenth century.

Comparison of the Lafferty Lane cemetery with other excavated unmarked family cemeteries in the Delaware Coastal Plain revealed similarities in general plan, orientation, graveshaft outline and brick burial vault construction, although the number of interments in other family cemeteries is generally less. One size exception may be the Marsh family cemetery outside Lewes, Delaware, which reportedly contained 125 graves of several generations of the Marsh family dating from 1762 to the present (Eckman 1955:409).

Analysis of family cemetery placement upon the landscape of southern Kent and central Sussex counties revealed consistencies in placement upon the family farm. The graveyard was usually located from 400 to 1000 feet away from the farmhouse on a piece of well drained ground set off by a masonry wall, iron fence, vegetation, or a boundary ditch. The location choice also included placing the cemetery in the 180 degree semicircle "to

the rear" of the house, away from the "public" area of the commonly traversed state or county road and driveway leading into the farm.

In summary, the limited excavation of the graves at the Lafferty Lane cemetery and the complete absence of headstones for grave identification served to limit the amount of data available for analysis. However, meaningful insights about cemetery design and placement were gained through a study of the internal arrangement of the graveshaft outlines and other cemetery features and a geographical comparison of the Lafferty Lane cemetery (7K-D-111) with a sample of other known family cemeteries in Kent and Sussex counties. In this manner, the Lafferty Lane cemetery analysis can prove useful to archaeologists, geographers, historians, demographers and planners concerned with the historic disposal of the dead in the Middle Atlantic Coastal Plain.

Family cemetery sites like Lafferty Lane, Byfield, and the Nowell Site, are representative of the larger cultural process of generational continuity and land ownership through time. It is significant that in Delaware there are more known and maintained family graveyards in southern Kent and Sussex counties than in New Castle County and northern Kent County. The lack of family cemeteries in the northern part of the state is probably a function of historically rapid land transfer and industrialization, and more recently, suburbanization and development. Conversely, in the southern, more rural parts of the state, the continued presence of the same family on a particular farm is a well-known and documented phenomenon

(Bausman 1941), indicating concern for family ties to the land over long periods of time. Thus, the family graveyards reinforce this view of landownership and cultural values, a view which has changed in the northern part of the state with rapid development and the influx of non-Delawareans into the area who have little or no ties to the land. Unfortunately, suburbanization and commercial development are beginning to have an effect on the previously rural character of Kent and Sussex counties. The family cemetery is a significant cultural resource which is endangered by this development, and this is particularly true of unmarked cemeteries, like Lafferty Lane. The loss of these cultural resources is perhaps inevitable, and certainly not new. Over fifty years ago, Works Progress Administration historian Jeanette Eckman wrote the epitaph for these fragile resources, and her statement is still true today:

Nearly every plantation of lower Delaware had a private burying-ground, but most of these plots... are abandoned jungles of briars and toppled gravestones. Each spring the ploughs go closer until finally, in some cases, fences and jungles and tombstones disappear and growing corn brings oblivion.

(Eckman 1955)

REFERENCES CITED

- Bachman, David C.
n.d. Loockerman's Range Site, 7K-C-365B, Dover, Delaware.
Ms. on file, University of Delaware Center for
Archaeological Research, Newark.
- Ball, Diane E.
1976 Dynamics of Population and Wealth in Eighteenth Century
Chester County, Pennsylvania. **Journal of
Interdisciplinary History** 6(4):621-644.
- Bartel, Brad
1982 A Historical Review of Ethnological and Archaeological
Analyses of Mortuary Practices. **Journal of
Anthropological Archaeology** 1:32-58.
- Bausman, R. O.
1940 **An Economic Study of Land Utilization of Kent County,
Delaware.** University of Delaware Agricultural
Experimental Station Bulletin 224, Newark.
- 1941 **An Economic Study of Land Utilization in Sussex County,
Delaware.** University of Delaware Agricultural
Experiment Station Bulletin No. 233, Newark.
- Blakely, Robert L. and Lane A. Beck
1982 Bioarchaeology in the Urban Context. In **Archaeology of
Urban America, the Search for Pattern and Process**,
edited by Roy S. Dickens, Jr., pp. 175-207. Academic
Press, New York.
- Bonine, Chesleigh A.
1956 Archaeological Investigations of the Dutch "Swanendael"
Settlement under DeVries 1631-1632. **The Archaeologist**
8(3):1-17.
- Bowen, Joanne
1988 Seasonality: An Agricultural Construct. In
Documentary Archaeology in the New World, edited by
Mary C. Beaudry, pp. 161-171. Cambridge University
Press, Cambridge.
- Burnston, Sharon Ann
1981 The Cemetery at Catoctin Furnace, Maryland: The
Invisible People. **Maryland Archaeology** 17(2):19-31.
- Carson, Cary, Norman F. Barka, William M. Kelso, Garry Wheeler
Stone, and Dell Upton
1981 Impermanent Architecture in the Southern Colonies.
Winterthur Portfolio 16(2/3):135-196.

- Catts, Wade P. and Jay F. Custer
1990 **A Cultural Resources Reconnaissance Planning Study of the Proposed Sussex East-West Corridor, Delaware Routes 404/18 and 9, Sussex County, Delaware.** Delaware Department of Transportation Archaeology Series (in press).
- Conrad, Henry C.
1908 **History of the State of Delaware.** 3 vols. Henry C. Conrad, Wilmington.
- Custer, Jay F., David C. Bachman and David J. Grettler
1987 **Phase I and II Archaeological Research Plan, U.S. Route 13 Relief Route, Kent and New Castle Counties, DE.** Delaware Department of Transportation Archaeology Series No. 54. Dover.
- Dethlefsen, Edwin S., L. Cabot Briggs, and Leo P. Beise
1977 **The Clement Site: Analysis of Skeletal Material. Man in the Northeast** 13:86-90.
- Dethlefsen, Edwin S. and James Deetz
1965 **Death's Heads, Cherubs, and Willow Trees: Experimental Archaeology in Colonial Cemeteries. American Antiquity** 31:502-510.
- 1967 **Death's Head, Cherub, Urns and Willow. Natural History** 76(3):28-37.
- Dethlefsen, Edwin S. and Nancy Demyttenaere
1977 **The Clement Site: Features and Artifacts. Man in the Northeast** 13:90-96.
- De Warville, Jacque Pierre Brissot
1970 **On America: New Travels in the United States of America, Performed in 1788.** Augustus M. Kelly, New York. Originally published in 1792.
- Dill, Raymond, W. Martin Dill, and Elizabeth Dill
1989 **Souls in Heaven, Names in Stone; Kent County, Delaware Cemetery Records.** Gateway Press, Baltimore.
- Eckman, Jeannette
1955 **Delaware: A Guide to the First State.** 2nd ed. Hastings House, New York.
- Francaviglia, Richard V.
1971 **The Cemetery as an Evolving Cultural Landscape. Annals of the Association of American Geographers** 61(3):501-509.
- French, Stanley
1975 **The Cemetery as Cultural Institution: the Establishment of Mount Auburn and the "Rural Cemetery" Movement.** In

French, Stanley (cont'd)

Death in America, edited by David E. Stannard, pp. 69-90. University of Pennsylvania, Philadelphia.

Goldstein, Lynne

1981 One-dimensional archaeology and multi-dimensional people: Spatial Organization and Mortuary Analysis. In **The Archaeology of Death**, edited by Robert Chapman, Ian Kennes, and Klaus Randsberg, pp. 53-69. Cambridge University, Cambridge.

Habenstein, Robert W. and William M. Lamers

1955 **The History of American Funeral Directing**. Bulfinch Printers, Milwaukee, Wisconsin.

Hancock, Harold

1932 A History of the Delaware Peach Industry. Ms. on file, Special Collections Room, Morris Library, University of Delaware. Newark.

1947 Agriculture in Delaware, 1789-1900. In **Delaware: A History of the First State**, vol. 1, edited by H. Clay Reed, pp. 373-389. Lewis Historical, New York.

1976 **A History of Kent County, DE**. Kent County Bicentennial Commission, Dover.

Hayes, Manlove

1860 **An Address Delivered Before the Agricultural Society of Kent County Convened at Dover on the 13th Day of March, 1860**. Delawarean Press, Dover.

Heite, Edward F.

1988 Draft Genealogy of the Descendants of Robert Graham. Manuscript on file, University of Delaware Center for Archaeological Research, Newark.

Hoffecker, Carol

1973 **Readings in Delaware History**. University of Delaware Press, Newark.

1977 **Delaware: A Bicentennial History**. W. W. Norton and Company, Inc., New York.

Hudson, John C.

1969 A Location Theory for Rural Settlement. **Annals of the Association of American Geographers** 59(2):365-381.

Jackson, J. B.

1967 The Vanishing Epitaph: From Monument to Place. **Landscape** 17:22-26.

Jeane, Donald G.

1969 The Traditional Upland South Cemetery. **Landscape** 18:39-41.

- Jordan, R. R.
1964 **Columbia (Pleistocene) Sediments of Delaware. Delaware Geological Survey Bulletin No. 12, Newark.**
- Kniffen, Fred
1967 **Necrogeography in the United States. The Geographical Review 57(3):426-427.**
- Lappen, James H.
1972 **Presbyterians on the Delmarva: The History of the New Castle Presbytery.** Privately published.
- Laws of the State of Delaware
1797 **Laws of the State of Delaware.** vols. I and II. Samuel and John Adams, New Castle, Delaware.
- Lemon, James T.
1972 **The Best Poor Man's Country: A Geographical Study of Early Southeastern Pennsylvania.** Johns Hopkins, Baltimore.
- McGuire, Randall H.
1988 **Dialogues with the Dead: Ideology and the Cemetery. In The Recovery of Meaning: Historical Archaeology in the Eastern United States,** edited by Mark P. Leone and Parker B. Potter, Jr., pp. 435-480. Smithsonian Institution, Washington, DC.
- Munroe, John A.
1978 **Colonial Delaware: A History.** KTO Press, Millwood, NY.

1984 **History of Delaware.** 2nd. ed. University of Delaware, Newark.
- Paltsits, Victor H.
1935 **Journal of Benjamin Mifflin: The Record of a Tour from Philadelphia to Delaware and Maryland, July 26 to August 14, 1762.** New York Public Library, New York.
- Payne, Ted M. and Ronald A. Thomas
1988 **Relocation of the Nowell Family Cemetery (7K-E-174, CRS #K-6395), Harrington, Delaware.** Final report submitted to United Parcel Service, Philadelphia, Pennsylvania, by MAAR Associates, Inc., Newark, Delaware.
- Pennsylvania Archives
1891 **Land Warrants for New Castle, Kent and Sussex Counties, ca. 1735. Pennsylvania Archives 7:193-204.**
- Powell, B. W.
1980 **The Riverbank Site: Observations on an Early, Unrecorded Cemetery. Man in the Northeast 16:48-59.**

- Presbytery Minutes
 1789- **Minutes of the General Assembly of the Presbyterian**
 1820 **Church of the U. S. A..** Presbyterian Board of
 Education, Philadelphia.
- Price, Larry W.
 1966 Some Results and Implications of a Cemetery Study. **The**
Professional Geographer 18(4):201-207.
- Rightmeyer, Nelson W.
 1947 **Anglican Church in Delaware.** Church Historical
 Society, Philadelphia.
- Sargent, Howard R.
 1977 The Clement Site: Field Investigations. **Man in the**
Northeast 13:79-86.
- Scharf, J. Thomas
 1888 **History of Delaware, 1609-1888.** J. L. Richards and
 Company, Philadelphia.
- Shogren, Michael G., Kenneth R. Turner and Jody C. Penoni
 1989 **Elko Switch Cemetery: An Archaeological Perspective.**
 Alabama State Museum of Natural History, Division of
 Archaeology, Report of Investigations 58.
- Silliman, Charles A.
 1982 **The Episcopal Church in Delaware, 1785-1954.** Diocese
 of Delaware, Wilmington.
- Stilgoe, John R.
 1978 Folklore and Graveyard Design. **Landscape** 22(3):22-28.
- Stonecipher, J. F.
 1887 **History of the Presbyterian Church of Dover, Delaware.**
 Privately published.
- Swauger, James L.
 1958 An American Burial Technique of the Early 19th Century.
Pennsylvania Archaeologist 29(1):38-39.
- Turner, Joseph Brown
 1902 **Church Records in the Presbytery of New Castle.**
 Presbyterian Historical Society, Philadelphia.
- Weslager, C. A.
 1961 **Dutch Explorers, Traders, and Settlers in the Delaware**
River Valley, 1609-1664. University of Pennsylvania
 Press, Philadelphia.
- 1967 **The English on the Delaware: 1610-1682.** Rutgers
 University Press, New Brunswick, New Jersey.

MAP SOURCES CONSULTED

Atlas of the State of Delaware. Pomeroy and Beers, Philadelphia, 1868.

Map of Kent County, Delaware. A. D. Byles, Philadelphia, 1859.

MANUSCRIPT SOURCES CONSULTED

Delaware State Archives

Kent County Deed Books

Kent County Probate Records

Kent County Orphans Court Records

Kent County Census Records 1800, 1810, 1820, 1840

Hopkins Plot Collection (Microfilm Reel 1.2, RG. 9030, Folder III, #88)

Tatnall Tombstone Index

Morris Library, University of Delaware

Lewes Presbytery Minutes 1758-1820 (Microfilm Reels 1267-1269)

PERSONNEL

Jay F. Custer, Principal Investigator, Director, University of Delaware Center for Archaeological Research, Professor of Anthropology. B.A. in Anthropology, Franklin and Marshall College. M.A., Ph.D. in Anthropology, Catholic University of America. Eighteen years experience in archaeological research in the Middle Atlantic.

David C. Bachman, Project Manager
B.A. in Anthropology, Arizona State University. M.A. in Anthropology, University of Delaware. Ten years experience in archaeological research in the Middle Atlantic region.

Wade P. Catts, Report Co-Author and Project Historian
B.A. in Anthropology/History, M.A. in History, Ph.D. candidate in History, University of Delaware. Ten years experience in archaeological research in the Middle Atlantic.

Amy Bachman, Field Crew
B.A. in Historic Preservation, Mary Washington College. Two years experience in archaeological research in the Middle Atlantic.

Martina Brennan, Field Crew
B.A. candidate in Anthropology, University of Delaware. Two years experience in archaeological research in Delaware.

Jonathan P. Canning, Graphic Artist
B.A. in European Art History, University of London. M.A. candidate in Art History, University of Delaware. Two years experience in archaeological research/graphics in Delaware and Canterbury, England.

Barbara Ann Doms, Report Preparation
One year experience in archaeological research in Delaware.

Susan Gentile, Report Preparation
B.S. in Elementary Education, Ohio University. Two years experience in archaeological research in Delaware.

Jack Goudsward, Field Crew
B.A. in Anthropology, William Patterson College, New Jersey. M.A. candidate in Anthropology, Montclair State, New Jersey. Eleven years experience in archaeological research in the Middle Atlantic.

David J. Grettler, Project Historian
B.A. in History/Anthropology, Pennsylvania State University. M.A. in American History, University of Delaware. Ph.D. Candidate, American Civilization Program, University of Delaware. Seven years of archaeological research in the Middle Atlantic region.

Jo Ann Jamison, Crew Chief

B.A. in Anthropology, University of Delaware. Five years of experience in Middle Atlantic archaeology.

Lauren Kutakoff, Graphic Artist

B.F.A. candidate in Illustration, University of Delaware. Three years experience as a graphic artist.

Ken Marchionno, Photographer

B.F.A. in Photography, University of Delaware. Twelve years experience in photography.

Eileen McMahon, Report Preparation

B.A. in Anthropology, University of Delaware. Five years experience in archaeological research in Delaware.

Deborah Page, Field Crew

B.A. in Anthropology, University of Delaware. Two years experience in archaeological research in Delaware.

Lynn Riley, Report Preparation

B.A. in Anthropology, University of Delaware. Four years experience in archaeological research in Delaware.

Keith Robertson, Field Crew

B.S. in Geology, Long Island University, Southampton. One year experience in archaeological research in the Middle Atlantic.

APPENDIX I

**SENATE BILL NUMBER 12, SUBCHAPTER 11,
DELAWARE UNMARKED BURIAL LAW**



SENATE
STATE OF DELAWARE
LEGISLATIVE HALL
DOVER, DELAWARE 19901

BETTY JEAN CANIFORD
SECRETARY OF THE SENATE

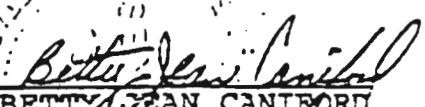
RECEIVED

JUN 30 1987

OFFICE OF THE CLERK OF THE SENATE

117 LEGISLATIVE HALL
DOVER, DELAWARE 19901
HOME: 302-734-1263
OFFICE: 302-736-4123

I, BETTY JEAN CANIFORD, SECRETARY OF THE SENATE, DO HEREBY
CERTIFY THAT THE ATTACHED COPY IS THE SAME ACT THAT WAS PASSED
BY THE SENATE AND THE HOUSE OF REPRESENTATIVES OF THE 134TH
GENERAL ASSEMBLY AND WAS SIGNED BY THE GOVERNOR OF THE STATE
OF DELAWARE ON 6/29/87.


BETTY JEAN CANIFORD
SECRETARY OF THE SENATE



DELAWARE STATE SENATE
134TH GENERAL ASSEMBLY

SENATE BILL NO. 12

AS AMENDED BY

HOUSE AMENDMENT NO. 2

AN ACT TO AMEND CHAPTER 54, TITLE 7, DELAWARE CODE RELATING TO ARCHAEOLOGICAL EXCAVATIONS.

WHEREAS, the Nanticoke tribe has inhabited the Delmarva Peninsula for hundreds upon hundreds of years; and

WHEREAS, the Nanticoke Indian tribe is proud of its heritage and maintains great reverence for the honor and dignity of its ancestors and other Indians who once inhabited the lands now comprising the State of Delaware and the Delmarva Peninsula; and

WHEREAS, the reverence and respect owed these ancestors of the Nanticoke tribe and other Indians who once inhabited the lands now comprising the State of Delaware and the Delmarva Peninsula has been greatly compromised by the excavations and display of the skeletal remains of these ancestors at such places as the Island Field Site near South Bowers; and

WHEREAS, these noble ancestors of the Nanticoke and other former native inhabitants should be allowed to rest in peace and dignity without having their remains exposed and placed on public display; and

WHEREAS, the Nanticoke Indian tribe is the sole remaining Indian tribe in the State of Delaware and thus the sole remaining representative of all of the tribes that once inhabited what is now Delaware.

NOW THEREFORE:

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF DELAWARE:

Section 1. Amend Chapter 54, Title 7, Delaware Code by designating the existing Sections 5401 and 5402 under a new subchapter entitled 'Subchapter I. General Provisions' and adding thereto a new subchapter to read as follows:

1 of 5

LC:WF:PJ
74

"Subchapter II. Archaeological Excavation

§5403. Archaeological Excavation: Purpose.

The purpose of this Act is:

- (1) To help provide adequate protection for unmarked human burials and human skeletal remains found anywhere within the State except on Federal land;
- (2) To provide adequate protection for unmarked human burials and human skeletal remains not within the jurisdiction of the Medical Examiner that are encountered during archaeological excavation, construction, or other ground disturbing activities;
- (3) To provide for adequate skeletal analysis of remains removed or excavated from unmarked human burials.
- (4) To provide for the dignified and respectful reinterment or other disposition of native American skeletal remains.

§5404. Definitions.

As used in this Chapter:

- (1) 'Director' shall mean Director of the Division of Historical and Cultural Affairs/Department of State.
- (2) 'Human skeletal remains' or 'remains' shall mean any part of the body of a deceased human being in any stage of decomposition.
- (3) 'Professional archaeologist' shall mean a person having (i) a graduate degree in archaeology, anthropology, history, or another related field with a specialization in archaeology, (ii) a minimum of one year's experience in conducting basic archaeological field research, including the excavation and removal of human skeletal remains, and (iii) designed and executed an archaeological study and presented written results and interpretations of such study.
- (4) 'Skeletal analyst' shall mean any person having (i) a graduate degree in a field involving the study of the human skeleton such as skeletal biology, forensic osteology or other relevant aspects of physical anthropology or medicine, (ii) a minimum of one year's experience in conducting laboratory reconstruction and analysis of skeletal remains, including the differentiation of the physical characteristics denoting cultural or biological affinity, and (iii) designed and executed as skeletal analysis, and presented the written results and interpretations of such analysis.
- (5) 'Unmarked human burial' shall mean any interment of human skeletal remains for which there exists no grave marker or any other historical

documentation providing information as to the identify of the deceased.

(6) 'Medical Examiner' shall be as defined in Chapter 47, Title 29.

(7) 'Committee' shall mean a body consisting of the Chief of the Nanticoke Indian Tribe, two members appointed by the Chief, the Director of the Division of Historical and Cultural Affairs of the Department of State and two members appointed by the Director and a seventh member from the private sector appointed by the Governor. The Committee members shall be residents of the State of Delaware and shall serve one-year, renewable terms.

§5405. Discovery of Remains and Notification of Authorities.

(a) Any person knowing or having reasonable grounds to believe that unmarked human burials or human skeletal remains are being encountered shall notify immediately the Medical Examiner or the Director.

(b) Unmarked burials or human skeletal remains which are encountered as a result of construction or agricultural activities, shall cease immediately upon discovery and the Medical Examiner or the Director notified of the discovery.

(c) Human burials or human skeletal remains which are encountered by a professional archaeologist, as a result of survey or excavations must be reported to the Director. Excavation and other activities may resume after approval is provided by the Director. The treatment, analysis and disposition of the remains shall conform to the provisions of this Chapter.

(d) The Director shall notify the Chief Medical Examiner, Department of Health and Social Services, of any reported human skeletal remains discovered by a professional archaeologist.

§5406. Jurisdiction Over Remains.

(a) Subsequent to notification of the discovery of an unmarked human burial or human skeletal remains, the Medical Examiner shall certify in writing to the Director, as soon as possible, whether the remains come under his jurisdiction.

(b) If the Medical Examiner determines that the remains come under his jurisdiction, he will immediately proceed with an investigation pursuant to Chapter 47 of Title 29.

(c) All those remains determined to be not within the jurisdiction of the Medical Examiner, shall be within the jurisdiction of the Director.

§5407. Archaeological Investigation of Human Skeletal Remains.

All excavations not under the jurisdiction of the Medical Examiner, shall be either conducted by, or under the supervision of, a professional archaeologist and shall be subject to permission from the landowner. All permissible excavations

shall be conducted in accordance with the regulations promulgated for this Chapter.

§5408. Consultation, Analysis and Disposition.

(a) The Committee shall be notified of all skeletal remains determined to be Native American within 5 days of discovery. Within 60 days of notification, the Director shall provide the Committee with a written plan for the treatment and ultimate disposition of the Native American skeletal remains.

(b) The Director shall publish notice of all excavations of human skeletal remains other than Native American, at least once per week for two successive weeks in a newspaper of general circulation in the county where the burials or skeletal remains were situated, in an effort to determine the identity or next of kin or both of the deceased. Treatment and ultimate disposition of the skeletal remains shall be subject to the written permission of the next of kin who notify the director within 30 days of the last published notice. The Director shall provide next of kin with a written plan for treatment and ultimate disposition of human skeletal remains.

(c) All skeletal analysis conducted pursuant to this Chapter shall be undertaken only by a Skeletal Analyst as defined in Section 5404(4) of this Chapter.

(d) Any previously excavated skeletal remains of Native Americans of the State of Delaware which are on display or remain uncovered as of the effective date of this Section shall be reinterred within one year. Treatment and disposition of all Native American remains discovered after enactment shall be determined by the Committee or if direct descent can be determined, by the next-of-kin. In any event, native American skeletal remains discovered after enactment, shall be reinterred within 90 days unless an extension is granted by the Committee. Ultimate disposition of all non-Native American remains shall be determined by the next-of-kin, if known. If next-of-kin are unknown, disposition shall be determined by the Director. All costs associated with reinterment of human skeletal remains must be borne by the next-of-kin, if known.

§5409. Prohibited Acts.

No person, unless acting pursuant to Chapter 47 of Title 29, shall:

(a) Knowingly acquire any human skeletal remains removed from unmarked burials in Delaware, except in accordance with the provisions of this Act.

(b) Knowingly sell any human skeletal remains acquired from unmarked burials in Delaware.

(c) Knowingly exhibit human skeletal remains.

§5410. Exceptions.

(a) Human skeletal remains acquired from commercial biological supply houses or through medical means are not subject to the provisions of this Act.

(b) Human skeletal remains determined to be within the jurisdiction of the Medical Examiner are not subject to the prohibitions contained in this Act.

(c) Human skeletal remains acquired through archaeological excavations under the supervision of a professional archaeologist are not subject to the prohibitions as provided in Section 5409(a) of this Title.

§5411. Penalties.

Any person who violates Section 5409 of this Chapter shall upon conviction be sentenced to pay a fine not less than \$1,000 nor more than \$10,000 or be imprisoned not more than 2 years or both. The Superior Court shall have jurisdiction of offenses under this Chapter."

APPENDIX II

DISCOVERY OF HUMAN REMAINS FORM, 7K-D-111



DELAWARE STATE HISTORIC PRESERVATION OFFICE
BUREAU OF ARCHAEOLOGY AND HISTORIC PRESERVATION
#15 The Green
Dover, DE 19901
(302) 736-5685

CRS. NO. K-6397
SITE NO. 7K-D-111
SPO MAP NO. 12-13-21
Soils MAP NO. K-18

DISCOVERY OF HUMAN REMAINS

1. Date (of Discovery): September 20, 1988
2. Location: On a corner boundary between land of Diversified Business Enterprises, Inc. and Williams & Son, Inc., SE of the intersection of Lafferty Lane and Rt. 113, Dover, Kent Co. (See attached 1878 (Attach sketch map and photos.) survey map of Dyer/Register farm).
3. Contact Person: Kevin W. Cunningham
Address: Loc. Studies, Box 778
DelDOT, Dover, DE 19904
Phone: 302-738-4644
4. Property Owner: Diversified Business Enterprises, INC.
Address: Lafferty Lane
Dover, De.
Phone: 302-734-1870
- Consultant: David C. Bachman, University of Delaware Center for Archaeological Research, 101 Ewing Hall, Newark, De. 19716. 302-451-6590
5. Details of Discovery (describe setting; field conditions; how remains were encountered): Locations of graves noted on attached 1878 plat; no evidence of graveyard on modern surface prior to excavation; surface mechanically stripped and presence of graves suggested by elongated organic stains in subsoil. Setting is a windbreak of trees on (over)
(Continue additional comments on reverse.)
6. Description of Remains (include notations on skeletal remains; state of preservation; associated artifacts, features; buildings; ground disturbances):
Two graves located, one adult and one small child. Both are partially excavated to date. Preservation is excellent. Both oriented with feet to the east. Coffin wood has apparently deteriorated; only items in the graves other than skeletal remains are badly oxidized coffin nails.
(Continue additional comments on reverse.)

7. JURISDICTION:

Date of Initial Telephone Contact: _____

As per section 5406 of Chapter 54 of the Delaware Code, the Medical Examiner's Office has reviewed the above description surrounding this discovery of human remains and has determined:

These remains _____ fall within the jurisdiction of the State Medical Examiner's Office.

_____ do not fall within the jurisdiction of the State Medical Examiner's Office.

CERTIFIED: _____
DATE: _____ 117 _____

5. (cont.) property boundary surrounded by fields in succession, Partial excavation of both graves by standard archaeological field methods revealed presence of in situ skeletal remains. DelDOT highway relocation project necessitated archaeological survey for compliance with Federal antiquities laws.

APPENDIX III
LAFFERTY LANE SITE ARTIFACT INVENTORY

FEATURE 1

Level 2: 1 1-inch wire staple

FEATURE 2

Level 6: 1 oxidized nail frag.
Level 7: 9 oxidized nail frags.
Level 8: 1 oxidized nail frag.

FEATURE 4

Level 1: 1 oxidized nail frag.
Level 2: 1 oxidized nail frag.
1 piece charcoal

FEATURE 6

Level 1: 1 wire staple

FEATURE 8

Level 1: 1 pipe bowl frag.

FEATURE 9

Level 1: 1 jasper flake

KEY:

frag(s). = fragment(s)

FEATURE 10

Level 1: 1 oxidized nail frag.

FEATURE 28, Section in N67E47

1 very small brick frag.

FEATURE 31, Section in N40E34

1 frag. clear window glass
(burnt)

FEATURE 79, Section in N121W30

16 oyster shell frags.
1 nail
4 unidentifiable iron frags.
2 pipe bowl frags.
1 pipe stem frag.
2 brick frags.
1 clear glass bowl (?) rim
frag.
1 sherd red slipware

**FEATURE 134, Section in
N101W64**

2 sherds redware
1 brick frag.

APPENDIX IV

GLOSSARY

Archaeology - The study of the people of the past through the recovery and analysis of the artifacts they left behind and their context.

Archival Research - Research done at places in which public or historical records, charters, and documents are stored and preserved.

Artifact - Any object shaped or modified by man, or as a result of human activity.

Builder's Trench - Feature related to the construction of a foundation.

Burial Vault - An arched structure, usually of stone, brick, or concrete used to encase a burial coffin.

Culture - The non-biological mechanism of human adaptation.

Diagnostic - Artifact with identifying traits that categorize the item to a specific time period.

Extant - Still in existence.

Feature - Any soil disturbance or discoloration that reflects human activity, or an artifact that, being too large to remove from a site, normally is recorded only; for example, house, storage pits, etc. Can also be a very dense collection of artifacts; for example, a lithic chipping feature.

Graveshaft - A long, narrow cavity dug into the earth for the purpose of housing a burial.

Hinterland - The land directly adjacent to and inland from a coast. Also a region remote from urban areas; back country.

Historic - The time period after the appearance of written records. In the New World, this generally refers to the time period after the beginning of European settlement at approximately 1600 A.D.

Hundred - A subdivision of some English and American counties.

Interface - A surface regarded as the common boundary of two bodies or spaces.

Intestate - A person who dies without making a will.

Loam - A loose soil composed of roughly equal parts of silt, clay, and sand, especially a kind containing organic matter and of great fertility.

Orphans Court - The County Court responsible for the welfare of orphans when a father died without leaving a will. Orphans Court watched over the estate until the children reached majority. A guardian was appointed by the Court, who was to make periodic returns of the estate to the Court. When the youngest heir came of age, the property could be divided among the heirs. These court records are filled with information regarding income, property, education, repairs of houses and outbuildings, contracts, and other useful material about eighteenth and nineteenth century life.

Pedestrian Survey - The act of walking along a surface such as an open field or plowed field and collecting artifacts seen on the surface of the ground. Also called surface collection.

Plowzone - In a plowed field, the upper layer of organic soil which is continually reworked by the plow. In the Middle Atlantic region, this is about 8-12 inches.

Posthole - A hole dug into the ground in which a post is placed.

Postmold - The organic stain in the ground which is left by a decayed wooden post. A postmold stain may occur inside of a posthole stain on an archaeological site.

Probate - The official proving of a will as authentic or valid.

Profile - A side view of a feature or test unit.

Seriation - A temporal ordering of artifacts based on the assumption that cultural styles (fads) change such that the popularity of a particular style or decoration can be associated with a certain time period.

Soil Horizon - Soils are divided into three horizons which reflect different kinds of chemical and physical processes that have resulted from changing climatic conditions.

Strata - The various layers of human or geological origin which comprise archaeological sites.

Stratigraphy - The examination of the soil layering on an archaeological site; the characteristics of each individual stratum and its relationship to others in the sequence is critical to understanding the temporal and spatial characteristics of the site.

Subsoil - Sterile, naturally occurring soils not changed by human occupation.